HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

SERVICE MANUAL

AX-1X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-46WT520	*RM-Y916*	*US/CND/MX*	*SCC-M37B-A*
KP-51WS520	*RM-Y916*	*US/CND/MX*	*SCC-M37C-A*
KP-57WS520	*RM-Y916*	*US/CND/MX*	*SCC-M37A-A*

ORIGINAL MANUAL ISSUE DATE: 7/2004

☛ **:UPDATED ITEM**

REVISION DATE	SUBJECT
7/2004	No revisions or updates are applicable at this time.
10/2004	Corrected 1-9. Speaker Grille, HA1 Board, and HB2 Board Removal (KP-46WT520 Only) to show correct location of HB2 Board. Replaced Page 14 with Page 14 Removed Note from section 2-12-1. Setup For Adjustment. Note is intended for use by the factory during production, and should not be performed by service technicians. Replaced Page 50 with Page 50
12/2004	Corrected PN for AC Power Cord for KP-51WS520/57WS520 Models. Replaced Page 104 with Page 104
12/2004	Corrected PN for Resistor Bridge on A Board Replaced Page 127 with Page 127
2/2005	Updated Table of Contents (Replaced Page 3 with Page 3) Added Caution statement (Replaced Page 5 with Page 5) BH Board introduced due to design change. Added BH Board Removal to Disassembly section (Replaced Page 12 with Page 12) Added BH Board Schematics, PWBs, Exploded View, and Electrical Parts List (Added Pages 93-A through 93-C, Replaced Pages 148-150 with Pages 148-157) Corrected PN for Bottom Cabinet (46) Assy, Corrected/removed items included in Speaker Grill Assembies (Replaced Page 102 & 103 with Page 102 & 103) Added BH Board and A Board (Replaced Page 104 with Page 104) New CRT Coupler Assemblies & Shades introduced for KP-46WT520/51WS520 Affects SNs 8,500,001 and up (Replaced Page 105 with Page 105) Added A Board differences to Electrical Parts List (Replaced Page 111 and 118 with 111 and 118)
8/2005	Corrected position of CRT Couplers and Shades (Replaced Page 105 with 105)

COLOR REAR VIDEO PROJECTION

SONY®

9-965-968-06

Self Diagnosis Supported model

SERVICE MANUAL

AX-1X CHASSIS

MODEL NAME	REMOTE COMMANDER	DESTINATION	CHASSIS NO.
KP-46WT520	*RM-Y916*	*US/CND/MX*	*SCC-M37B-A*
KP-51WS520	*RM-Y916*	*US/CND/MX*	*SCC-M37C-A*
KP-57WS520	*RM-Y916*	*US/CND/MX*	*SCC-M37A-A*

KP-51WS520

RM-Y916

COLOR REAR VIDEO PROJECTION

SONY®

9-965-968-06

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SPECIFICATIONS

Power Requirements 120V AC, 60Hz

Power Consumption (W)
In Use (Max) 235W
In Standby Under 1 W

Inputs/Outputs **HDMI IN**
Video
1080i, 720p, 480p, 480i
Audio
Two channel linear PCM 32, 44.1, and 48 kHz, 16, 20, and 24 bit

Video (IN)
4 total (1 on front panel)
1Vp-p, 75ohms unbalanced, sync negative

S Video (IN)
3 total (1 on front panel)
Y: 1Vp-p, 75ohms unbalanced, sync negative
C: 0.286Vp-p (Burst signal), 75ohms

Audio (IN)
7 total (1 on front panel)
500 mVrms (100% modulation)
Impedance:47 kilohm

Component Video Input
2 (Y,P_B,P_R)
Y: 1.0 Vp-p, 75 ohms unbalanced, sync negative;
P_B: 0.7 Vp-p, 75 ohms;
P_R: 0.7 Vp-p, 75 ohms

Control S (IN/OUT)
1 total

Variable/Fixed Audio (OUT)
More than 408 m Vrms at the maximum volume setting (Variable)
More than 408 m Vrms (Fixed) Impedance (output):2 kilohms

	KP-46WT520	KP-51WS520	KP-57WS520
Speaker Output (W)	20W x 2		
Dimensions (W x H x D)			
mm	1086 x 1017 x 609 mm	1194 x 1280 x 666 mm	1326 x 1377 x 692 mm
in	$42^{3/4}$ x 40 x 24 in	47 x $50^{1/2}$ x $26^{1/4}$ in	$52^{1/4}$ x $54^{1/4}$ x $27^{1/4}$ in
Mass kg	61.3 kg	77.2 kg	88 kg
lbs	135 lbs	170 lbs	194 lbs

Projection System
3 picture tubes, 3 lenses, horizontal in-line system

Picture Tube
7-inch high-brightness monochrome tubes (6.3 raster size), with optical coupling and liquid cooling system.

Projection Lenses
High performance, large diameter hybrid lens F1.1

Antenna
75 ohm external terminal for VHF/UHF

Television System
NTSC, American TV Standard

Channel Coverage
VHF: 2-13/UHF: 14-69/CATV: 1-125

Screen Size (measured diagonally)
46 inches (KP-46WT520)
51 inches (KP-51WS520)
57 inches (KP-57WS520)

Supplied Accessories
Remote Control RM-Y916
Batteries (2) size AA (R6)

Optional Accessories
A/V Cable (VMC-810/820/830 HG)
Audio Cable (RKC-515HG)
Component Video Cable (VMC-10/30 HG)
Control S Cable (RK-G69HG)
TV Stand SU-46WT11 (For KP-46WT520 Only)

Design and specifications are subject to change without notice.

WARNINGS AND CAUTIONS

CAUTION

☛ These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.

⚠ SAFETY-RELATED COMPONENT WARNING!!

Components identified by shading and ⚠ mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

ATTENTION!!

☛ Ces instructions de service sont à l'usage du personnel de service qualifié seulement. Pour prévenir le risque de choc électrique, ne pas faire l'entretien autre que celui contenu dans le Mode d'emploi à moins que vous soyez qualifié faire ainsi.

Afin d'eviter tout risque d'electrocution provenant d'un châssis sous tension, un transformateur d'isolement doit etre utilisé lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.

⚠ ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!

Les composants identifies par une trame et par une marque ⚠ sur les schemas de principe, les vues explosees et les listes de pieces sont d'une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l'importance est critique pour la securite du fonctionnement sont identifies dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.

2. Check the interboard wiring to ensure that no wires are “pinched” or touching high-wattage resistors.

3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.

4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.

5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.

6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.

7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.

8. Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instructions.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson’s 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

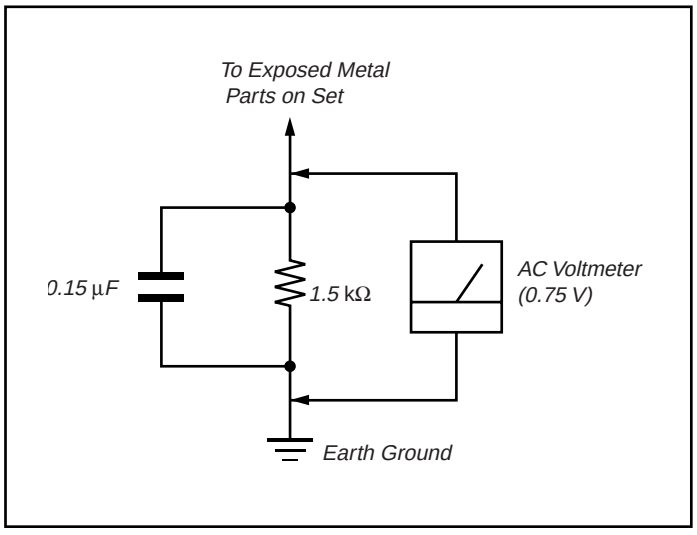


Figure A. Using an AC voltmeter to check AC leakage.

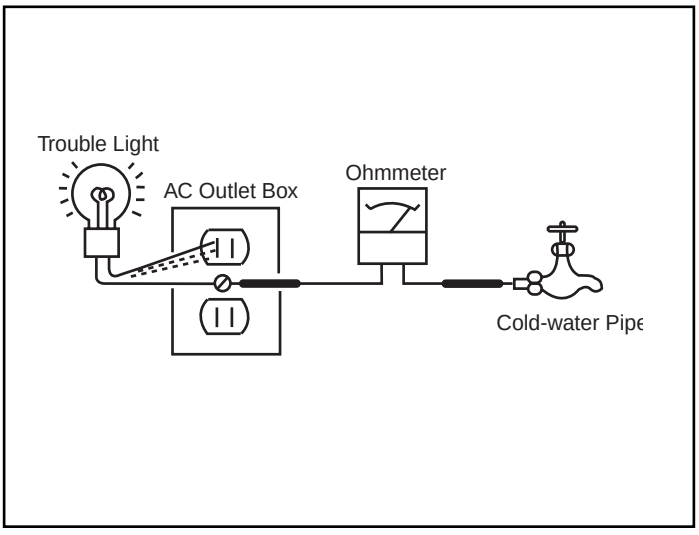


Figure B. Checking for earth ground.

SELF-DIAGNOSTIC FUNCTION

Self Diagnosis Supported model

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

Diagnostic Test Indicators

When an error occurs, the STANDBY/TIMER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

Results for all of the following diagnostic items are displayed on screen. If the screen displays a "0", no error has occurred.

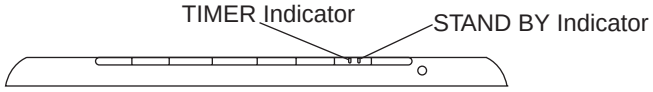
Diagnostic Item	No. of times STANDBY / TIMER lamp flashes	Display Result	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light	_____	• Power cord is not plugged in. • Fuse is burned out (F6000). (G Board)	• Power does not come on. • No power is supplied to the TV. • AC Power supply is faulty.
+B Overcurrent (OCP)*	2 times	2:0 or 2:1	• H.OUT (Q5001) is shorted. (D Board) • +B PWM (Q5201) is shorted. (D Board)	• Power does not come on. • Load on power line shorted.
+B Overvoltage (OVP)	3 times	3:0 or 3:1	• IC6503 is faulty. (D Board)	• Has entered standby mode.
Vertical Deflection Stopped	4 times	4:0 or 4:1	• 15V is not supplied. (D Board) • IC5101 is faulty. (D Board)	• Has entered standby mode after Horizontal raster. • Vertical deflection pulse is stopped. • Power line is shorted or power supply is stopped.
White Balance Failure (not balanced)	5 times	5:0 or 5:1	• Video OUT (IC9101, IC9201, IC9301) is faulty. (CR, CG, CB Board) • CRT drive (IC452) is faulty. (A Board) • G2 is improperly adjusted.**	• No raster is generated. • CRT cathode current detection reference pulse output is small.
LOW +B OCP/OVP (overcurrent/overvoltage)***	6 times	6:0 or 6:1	• +5 line is overloaded. (A and BM Boards) • +5 line is shorted. (A and BM Boards) • IC303 is faulty. (A Board)	• No picture
Horizontal Deflection Stopped	7 times	7:0 or 7:1	• Q5006 is broken (D Board) • IC452 is faulty (A Board)	• No picture
Audio Protection	8 times	8:0 or 8:1	• + or - 22V audio supply is not present—Check PS600 & PS601 • Audio AMP is damaged IC601 on A Board	• No picture
Zero Crossing Detector	9 times	9:0 or 9:1	• D6116 or D6301 is open (G Board)	• No picture
HV Protection	10 times	10:0 or 10:1	• Q8014 or Q8013 have shorted replace along with R8051 on D Board • IC8005 is damaged (D Board)	• No picture

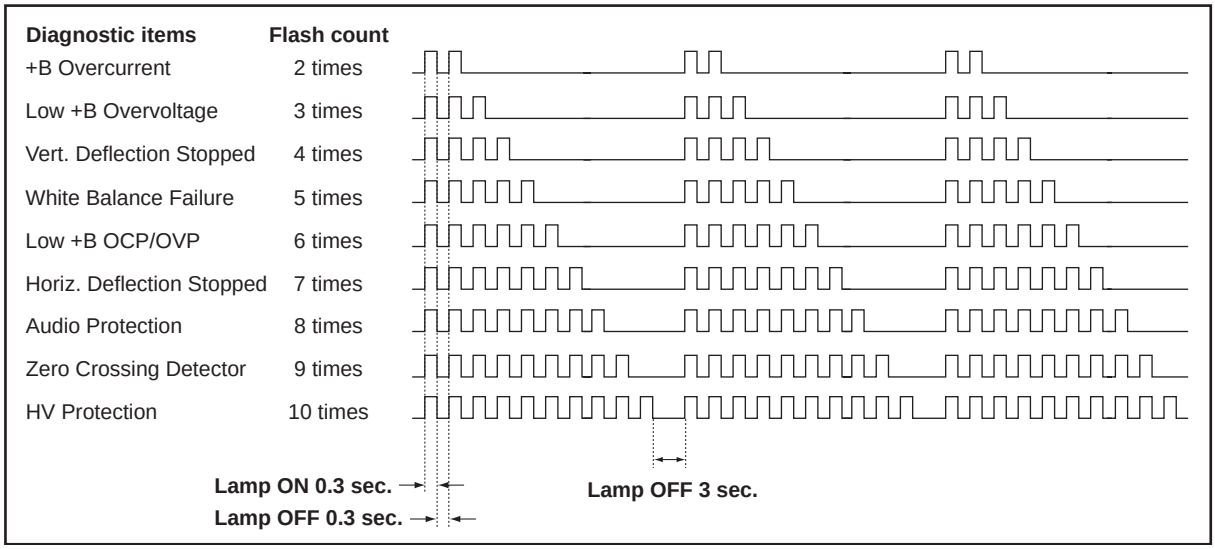
* If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on the screen.

** Refer to Screen (G2) Adjustment (Fine Adjustments) in Section 2 of this manual.

*** If STANDBY/STEREO LED flashes six (6) times, unplug the unit and wait 10 seconds before performing the adjustment.

Display of Standby/Timer LED Flash Count





Release of TIMER STAND BY indicator blinking

The TIMER/STANDBY indicator blinking display is released by turning OFF the power switch on the TV main unit or removing the plug from the power.

Self-Diagnosis Screen Displays

In cases of malfunctions where it is not possible to determine the symptom such as when the power goes off occasionally or when the screen disappears occasionally, there is a screen display on whether the malfunction occurred or not in the past (and whether the detection circuit operated or not) in order to allow confirmation.

Screen Display Method

Quickly press the remote command button in the following order from the standby state.

[Display] ⟶ Channel [5] ⟶ Sound Volume* [−] ⟶ Power ON

SELF DIAGNOSIS	
2: +B OCP	0
3: +B OVP	0
4: VSTOP	0
5: AKB	1
6: LOWB	0
7: H-STOP	0
8: AUDIO	0
9: ZCD	0
10: HV PROT	0
101: WDT	24

Numeral “0” means that no fault was detected.

Numeral “1” means a fault was detected one time only.

*Note that this differs from entering the service mode (sound volume [+])

Self-Diagnosis Screen Display

The results display is not automatically cleared. In case of repairs and after repairs, check the self-diagnosis screen and be sure to return the results display to “ 0 ”.

If the results display is not returned to “ 0 ” it will not be possible to judge a new malfunction after completing repairs.

Method of Clearing Results Display

1. Power off (Set to the stand by mode.)
2. [Display] ⟶ Channel [5] ⟶ Sound Volume [+] ⟶ Power ON (Service Mode)
3. Channel [8] ⟶ [ENTER] (Test reset = Factory preset condition)

Method of Ending Self Diagnosis Screen

When ending the self-diagnosis screen completely, turn the power switch OFF on the remote commander or the main unit.

Self-Diagnosis Function Operation

+B overcurrent (OCP)
Occurs when excessive current flows through R6812. The increase in voltage across Q6803 causes it to turn on which sends a high signal to the micro.

+B overvoltage (OVP)
IC6801 detects +B OVP condition and turns on Q6802. This sends a high signal to the micro and also shuts down the AC relay.

V-STOP
Occurs when an absence of the vertical deflection pulse is detected by pin 56 of IC452 (A Board). Power supply will shut down when waveform interval exceeds 2 seconds.

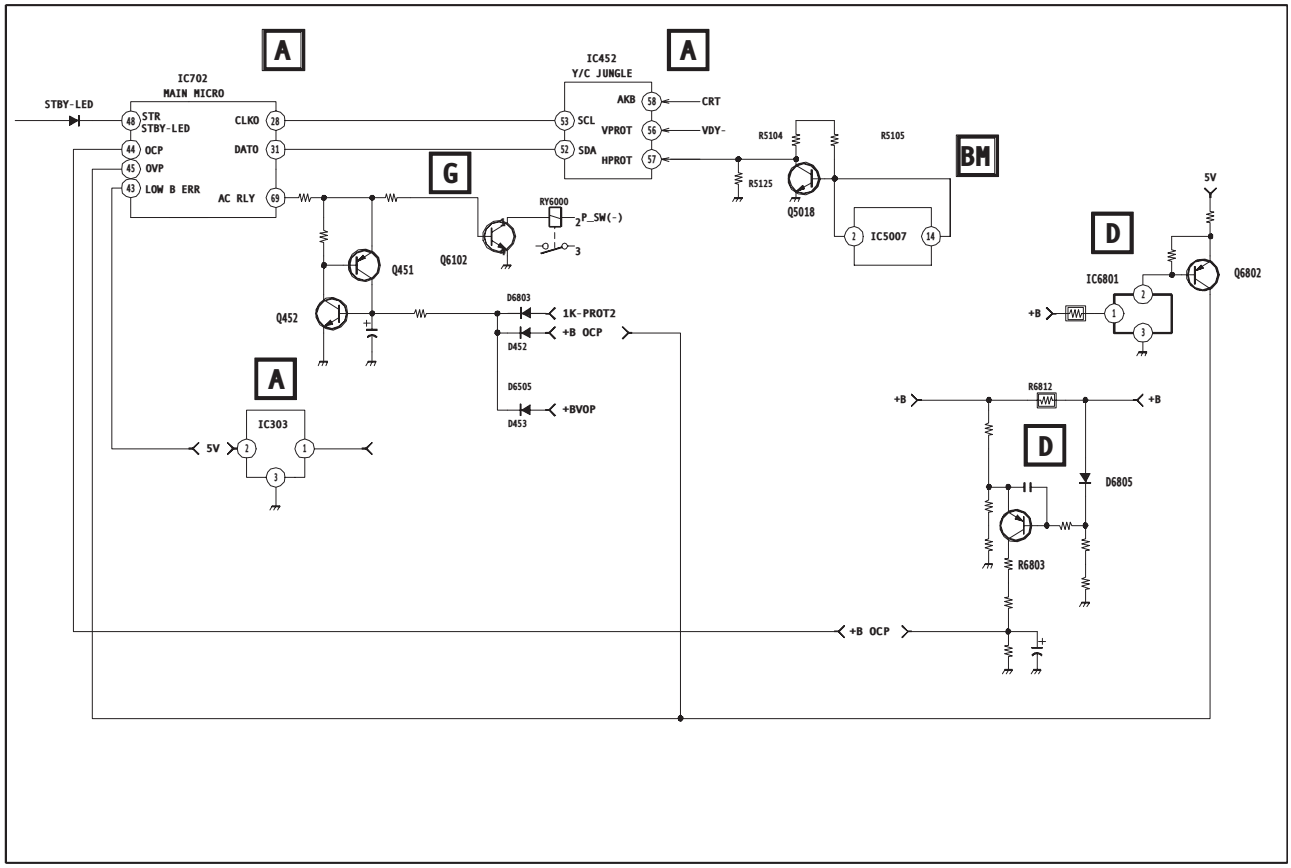
White Balance Failure
If the RGB levels* do not balance within 2 seconds after the power is turned on, this error will be detected by IC452 (A Board). TV will stay on, but there will be no picture.

*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K).

Low B OCP/OVP
Occurs when set 5V is out.
Also check for : + 135V line shorted
+ 135V line is going over 145V

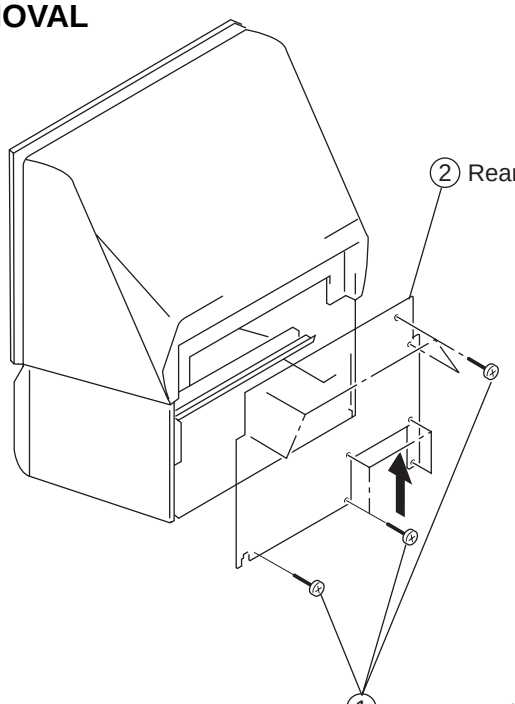
Horizontal Deflection Stopped
Occurs when either:
1) a +B overcurrent is detected (Q6803), or
2) IC452 (A Board) is damaged.

Self-Diagnosis Block Diagram

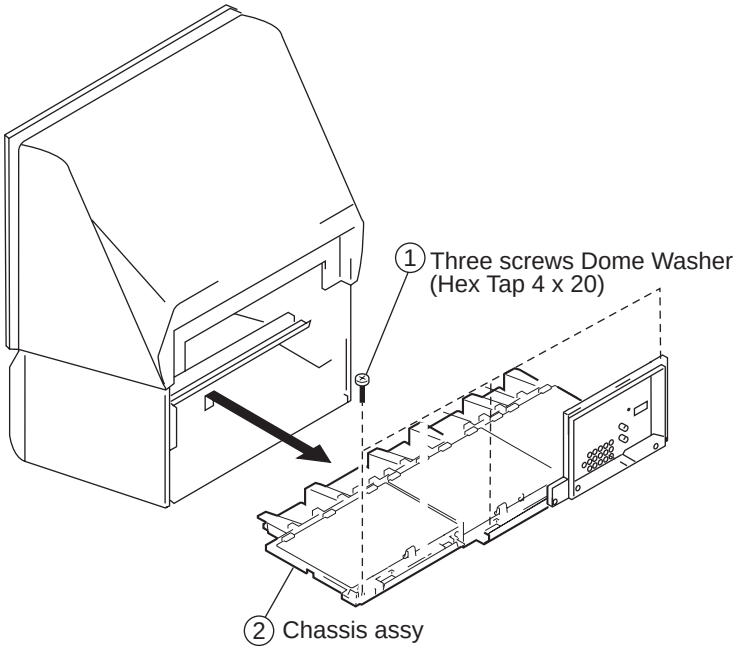


SECTION 1: DISASSEMBLY

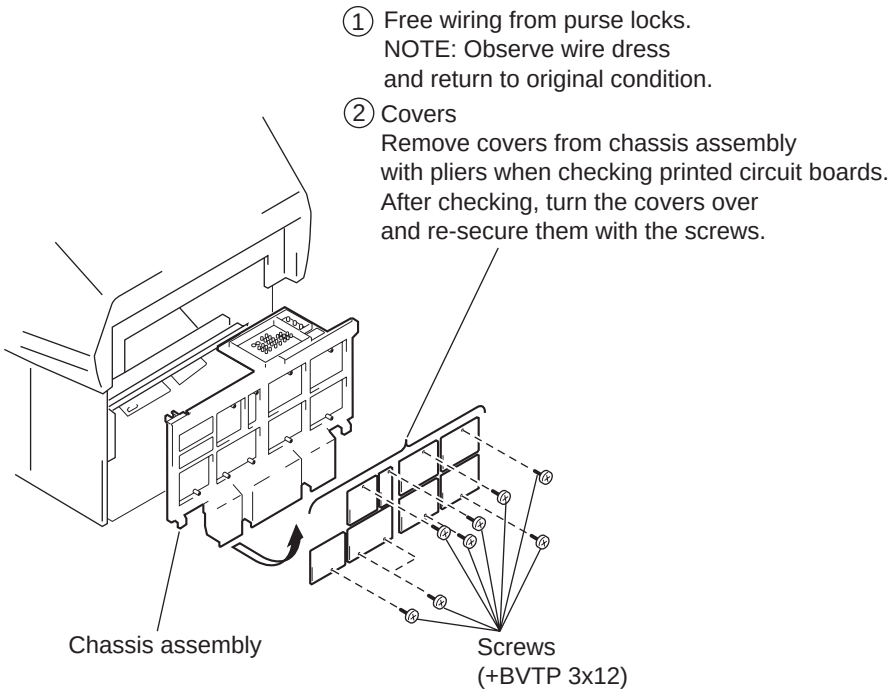
1-1. REAR BOARD REMOVAL



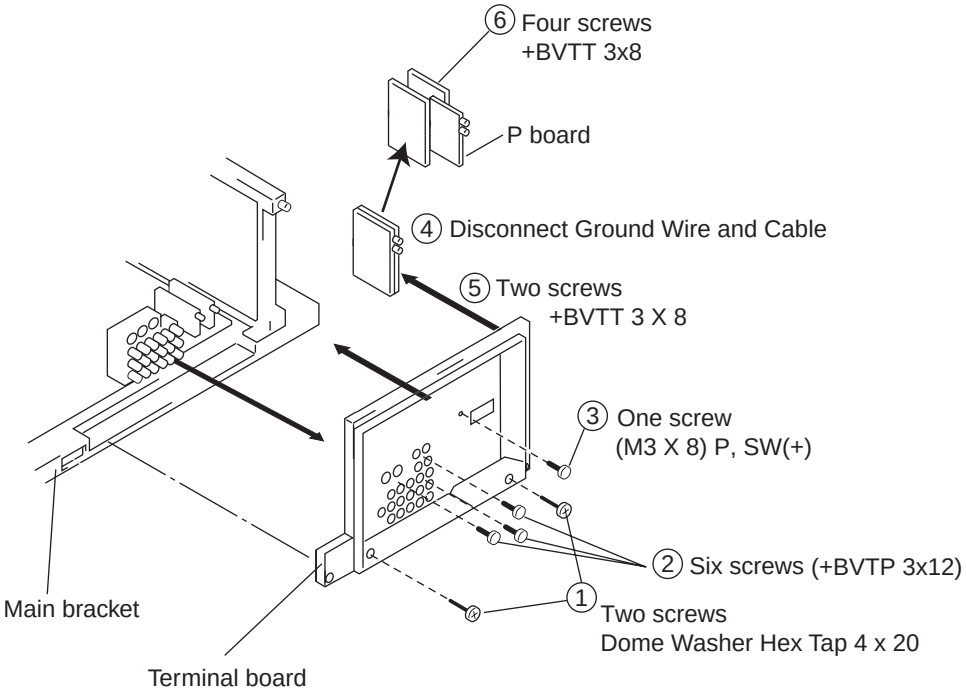
1-2. CHASSIS ASSEMBLY REMOVAL



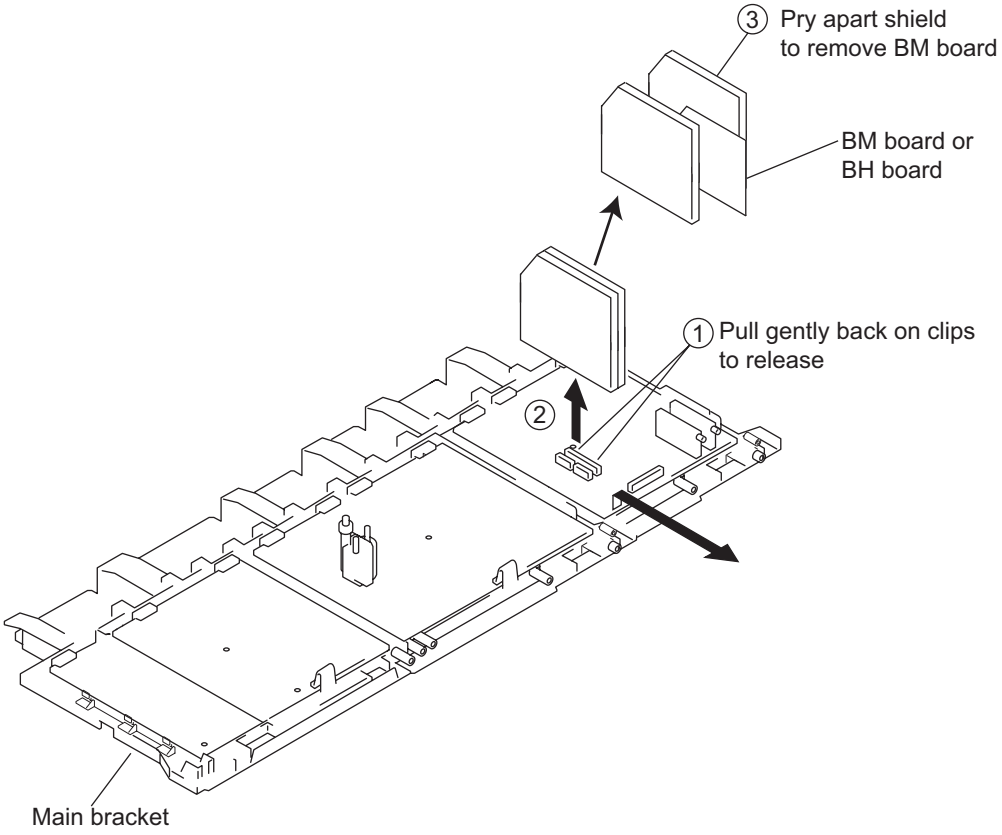
1-3. SERVICE POSITION


① Free wiring from purse locks.
NOTE: Observe wire dress
and return to original condition.
② Covers
Remove covers from chassis assembly
with pliers when checking printed circuit boards.
After checking, turn the covers over
and re-secure them with the screws.
Chassis assembly
Screws
(+BVTP 3x12)

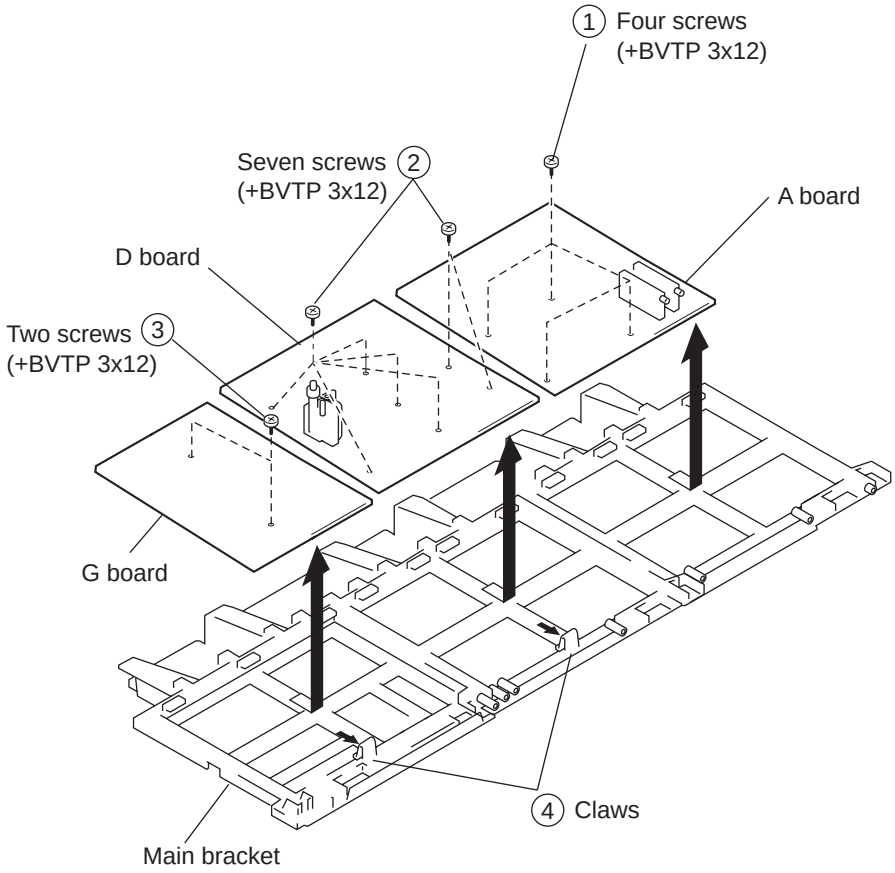
1-4. TERMINAL BOARD AND P BOARD REMOVAL



☛ 1-5. BM BOARD OR BH BOARD REMOVAL

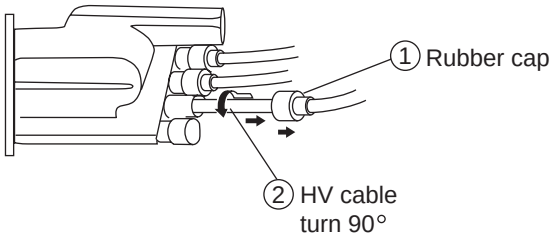


1-6. A BOARD, D BOARD, AND G BOARD REMOVAL

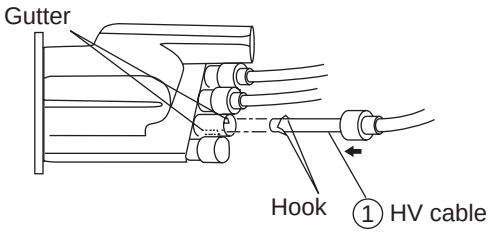


1-7. HIGH-VOLTAGE CABLE INSTALLATION AND REMOVAL

(1) Removal

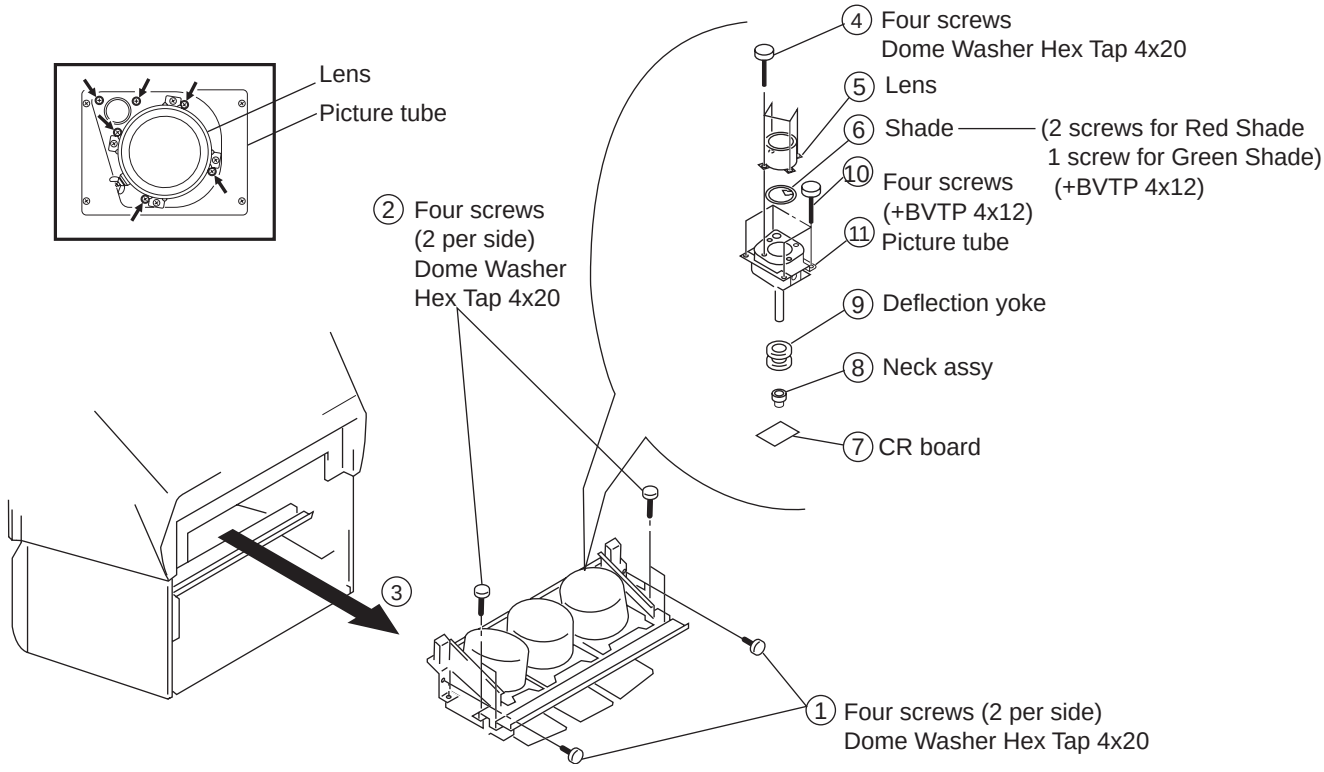


(2) Installation

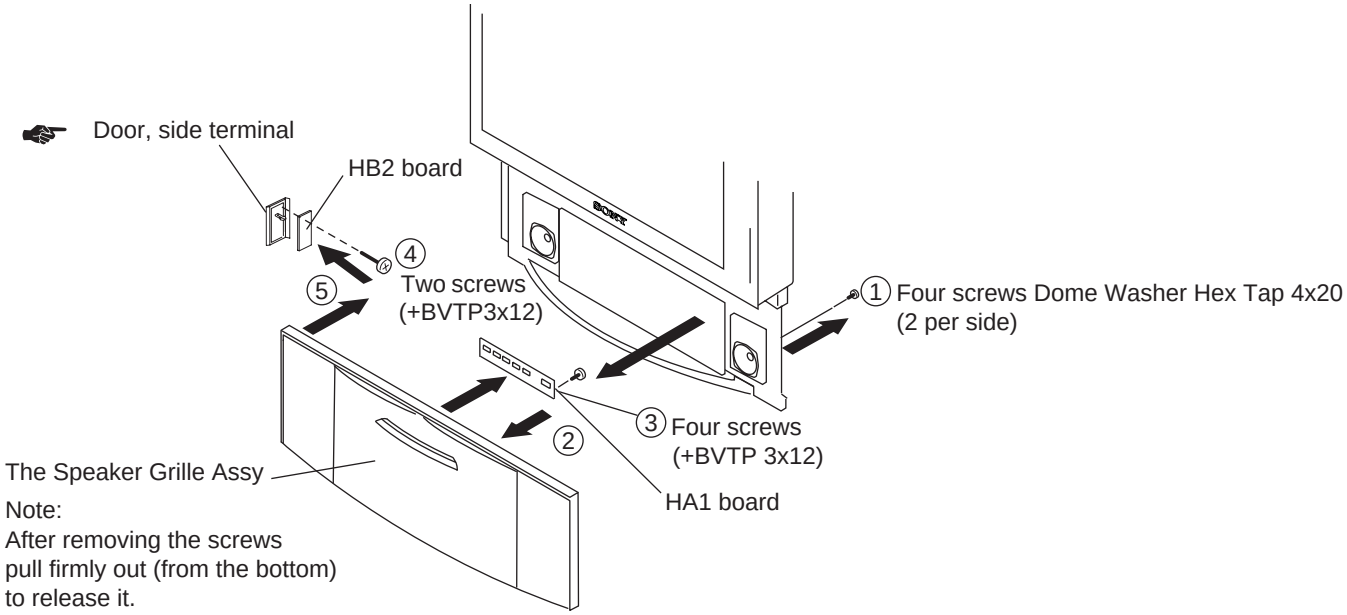


1-8. PICTURE TUBE REMOVAL

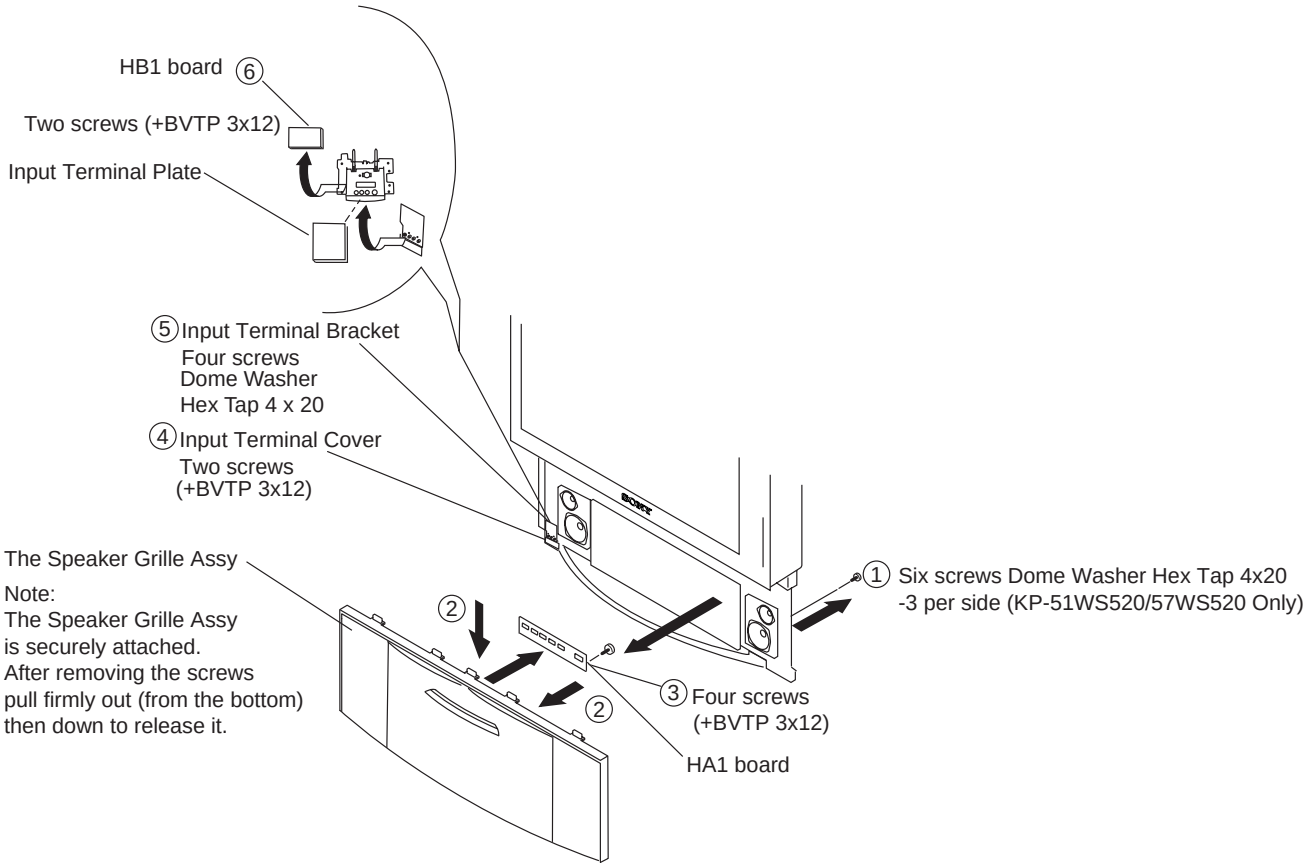
CAUTION: Removing the arrow-marked screws is strictly prohibited. If removed, it may cause liquid to spill.



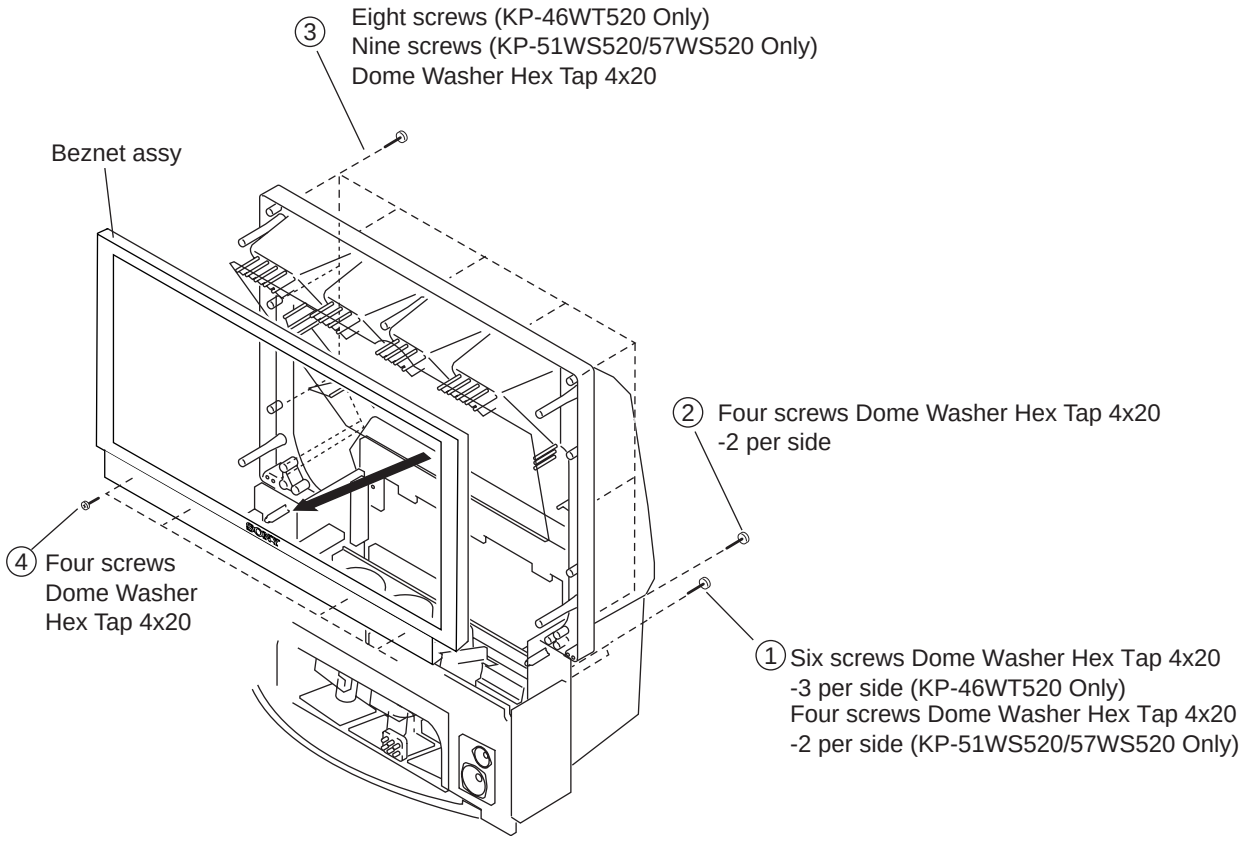
1-9. SPEAKER GRILLE, HA1 BOARD, AND HB2 BOARD REMOVAL (KP-46WT520 ONLY)



1-10.SPEAKER GRILLE, HA1 BOARD, AND HB1 BOARD REMOVAL (KP-51WS520/57WS520 ONLY)

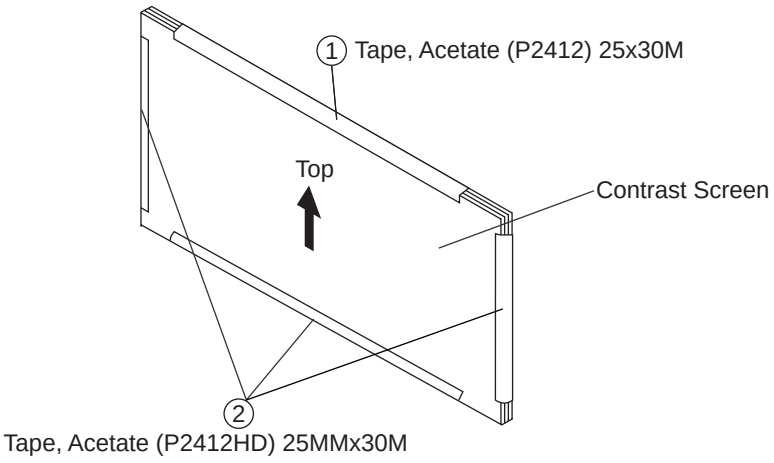


1-11.BEZNET ASSEMBLY REMOVAL


③ Eight screws (KP-46WT520 Only)
Nine screws (KP-51WS520/57WS520 Only)
Dome Washer Hex Tap 4x20
Beznet assy
② Four screws Dome Washer Hex Tap 4x20
-2 per side
④ Four screws
Dome Washer
Hex Tap 4x20
① Six screws Dome Washer Hex Tap 4x20
-3 per side (KP-46WT520 Only)
Four screws Dome Washer Hex Tap 4x20
-2 per side (KP-51WS520/57WS520 Only)

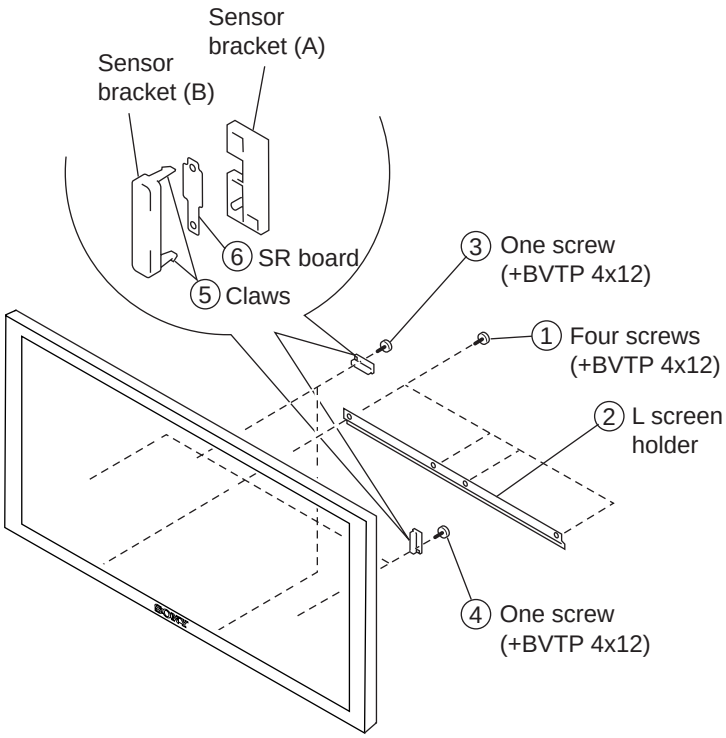
1-11-1.SCREEN TAPE METHOD

The following demonstrates the taping method when replacing the Contrast Screen or Diffusion Plates.
For Part Numbers refer to the Miscellaneous section in the back of the manual.



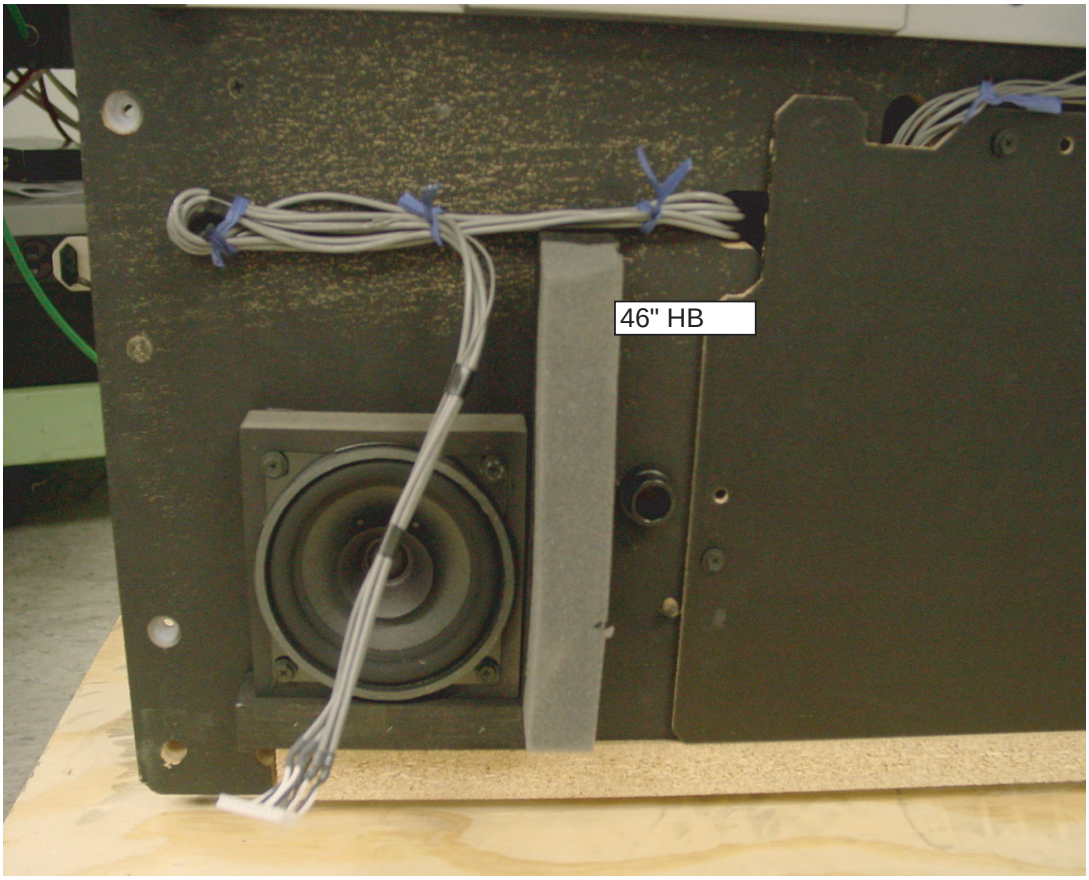
1-12.SR BOARD REMOVAL

The Screen Holder does not need to be removed in order to remove the SR boards.

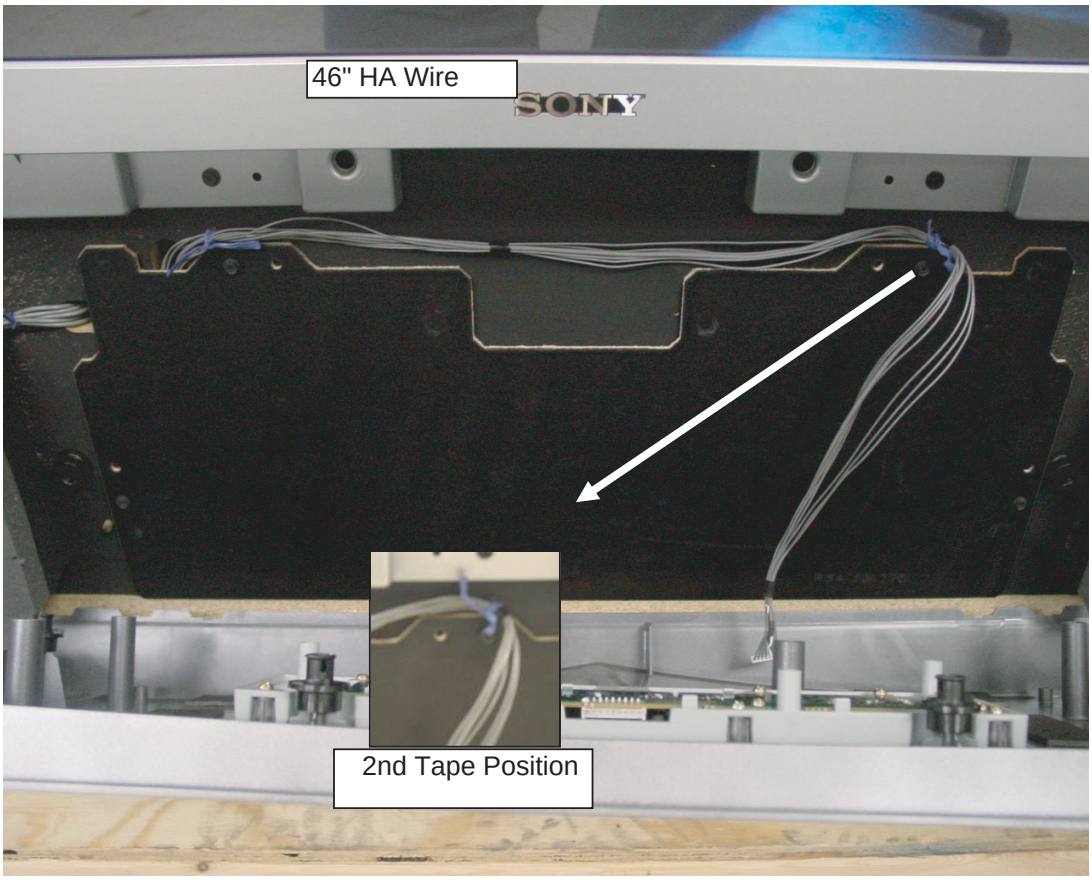


WIRE DRESSING

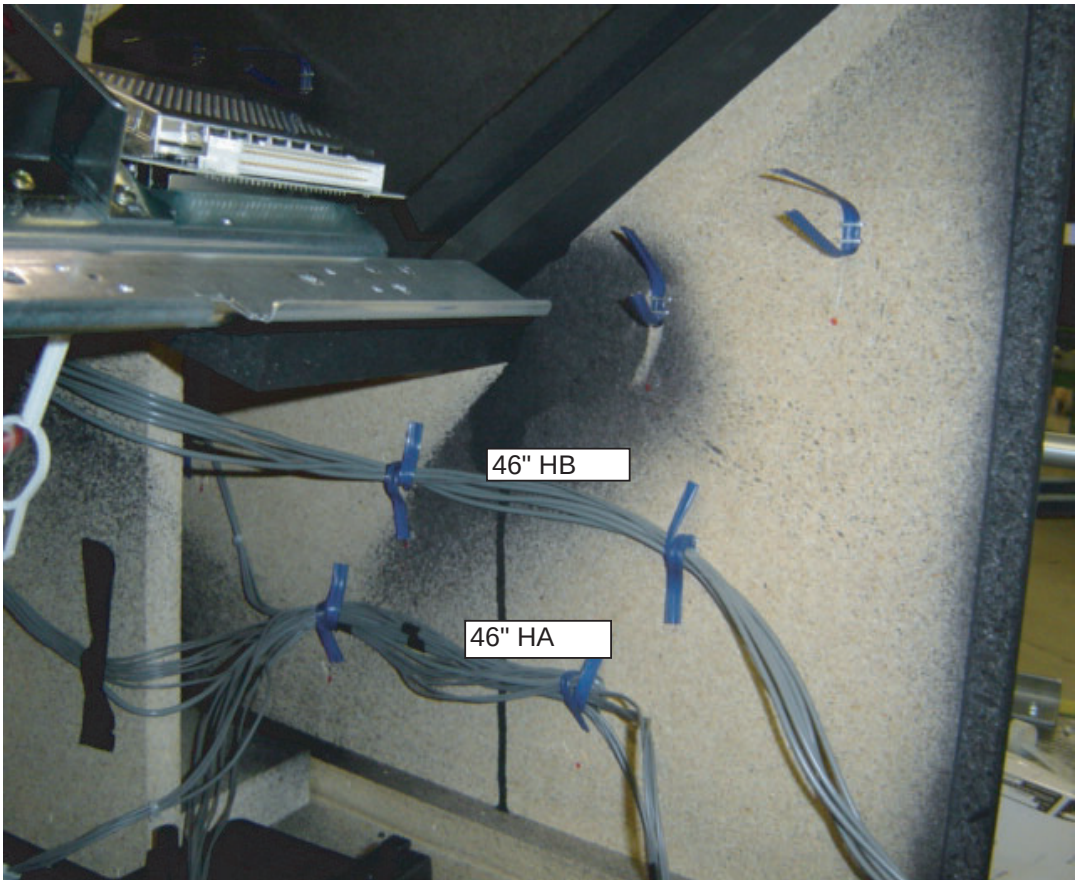
46 Cabinet



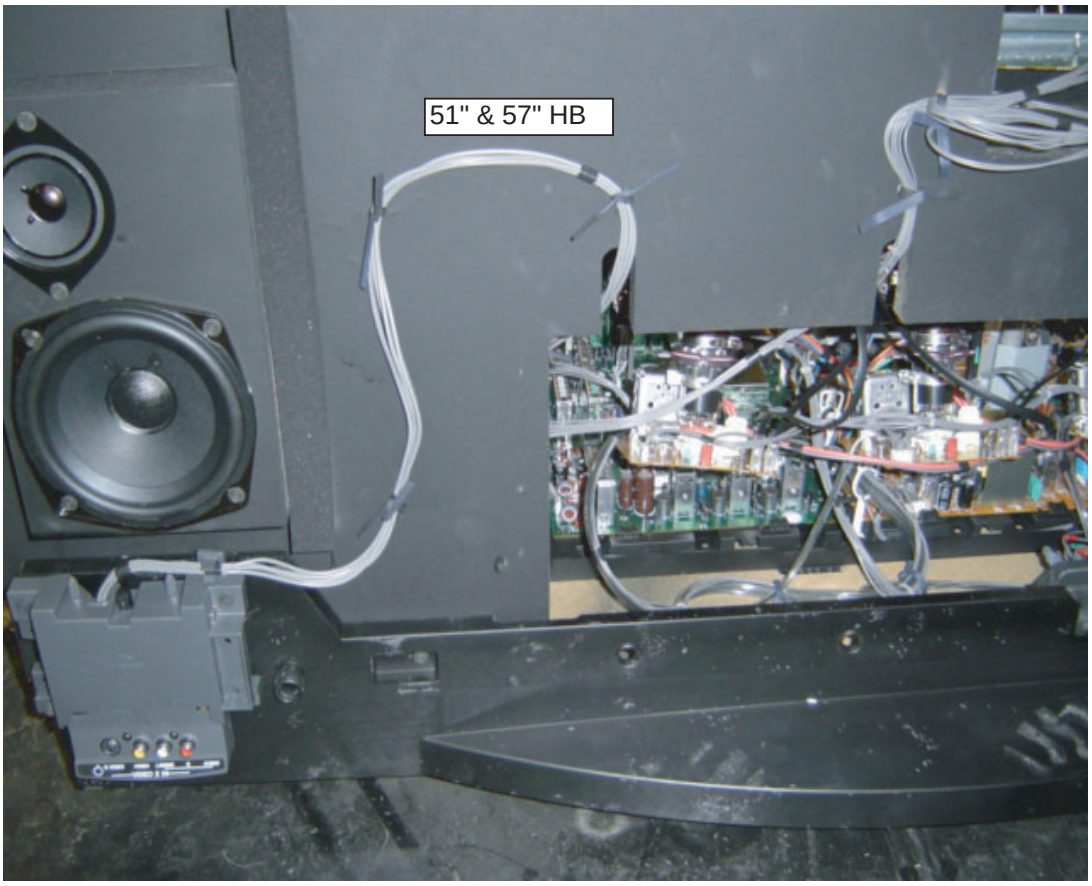
46 Cabinet



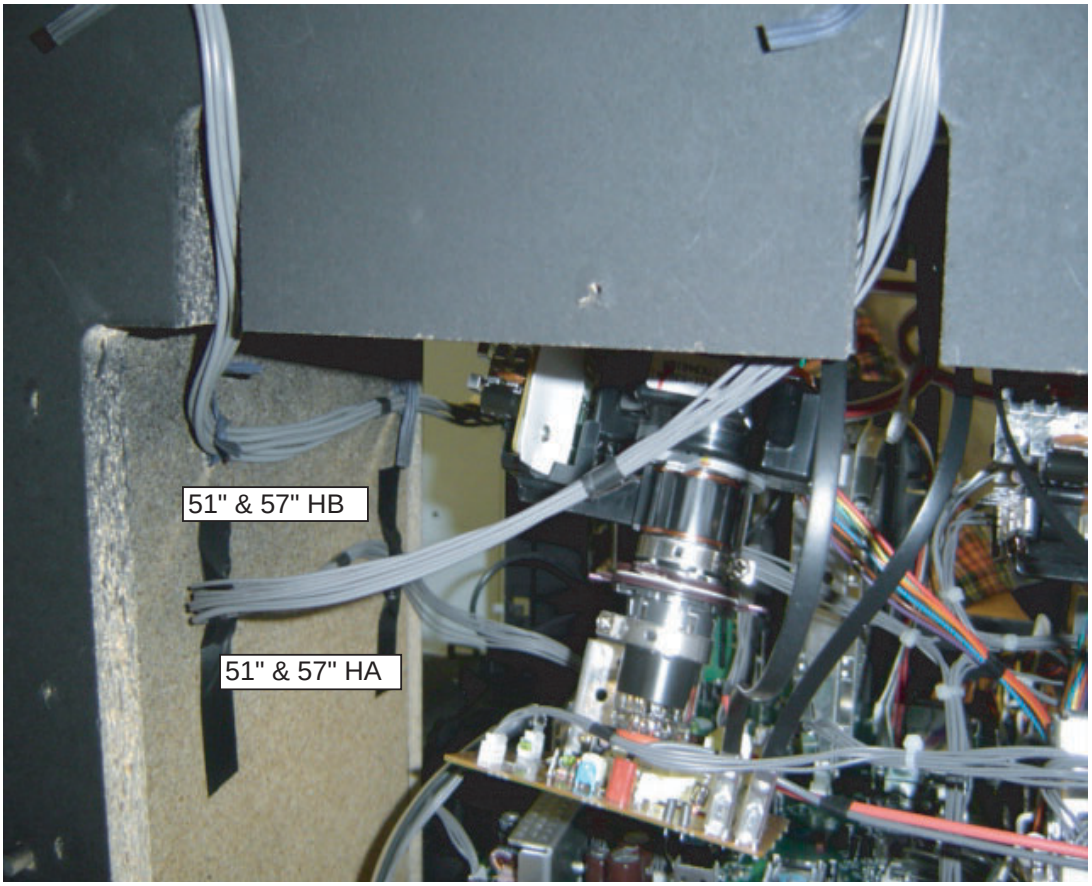
46 Cabinet



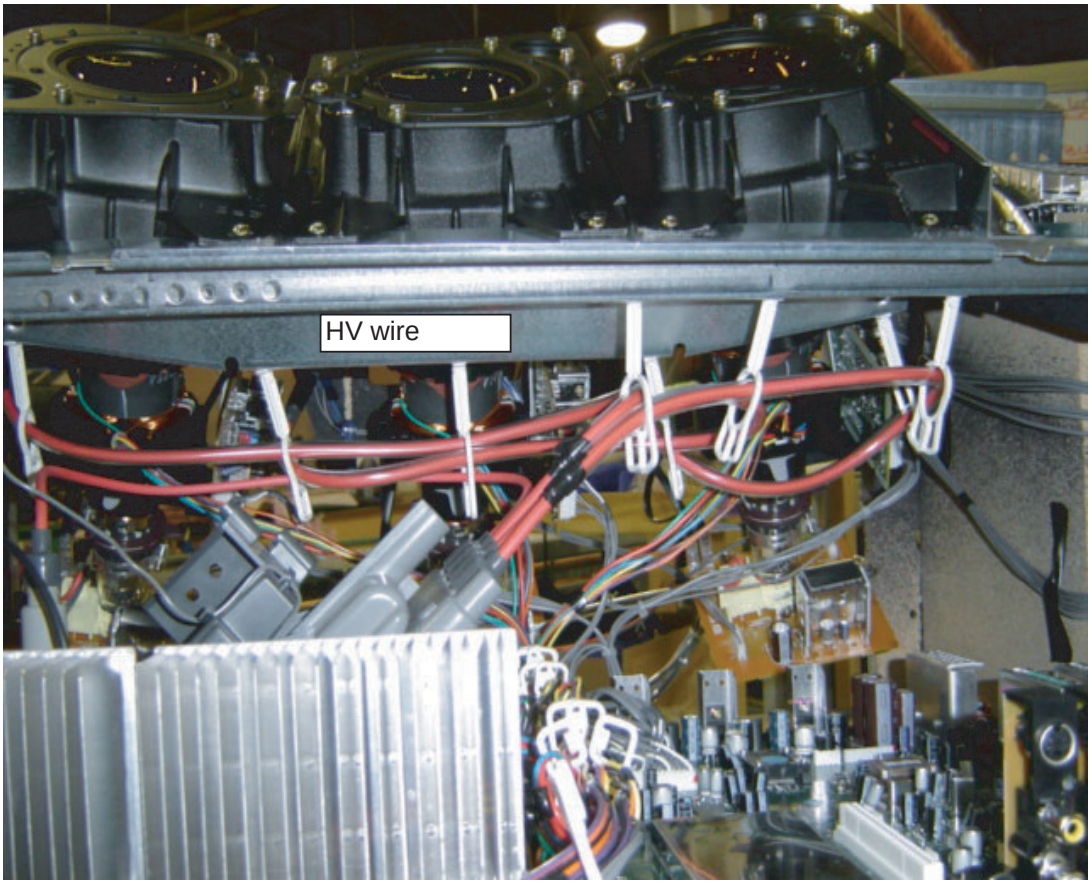
51 & 57 Cabinet



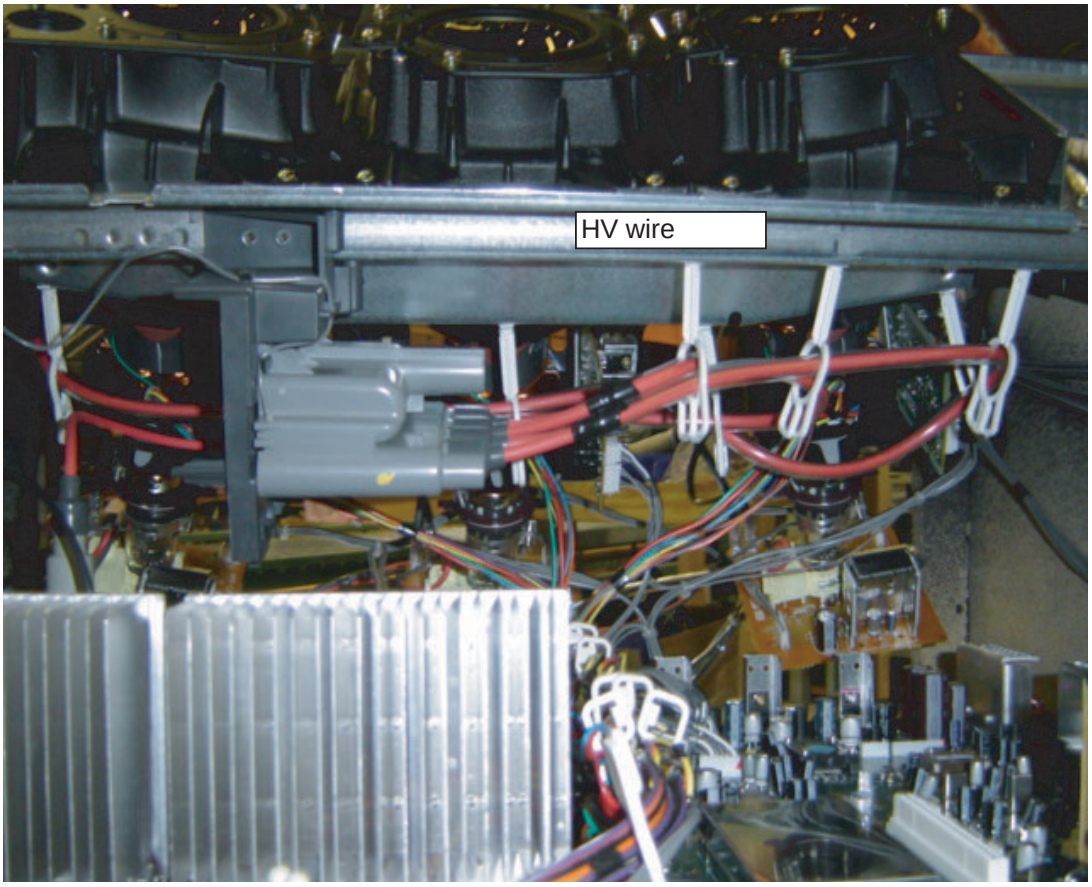
51 & 57 Cabinet



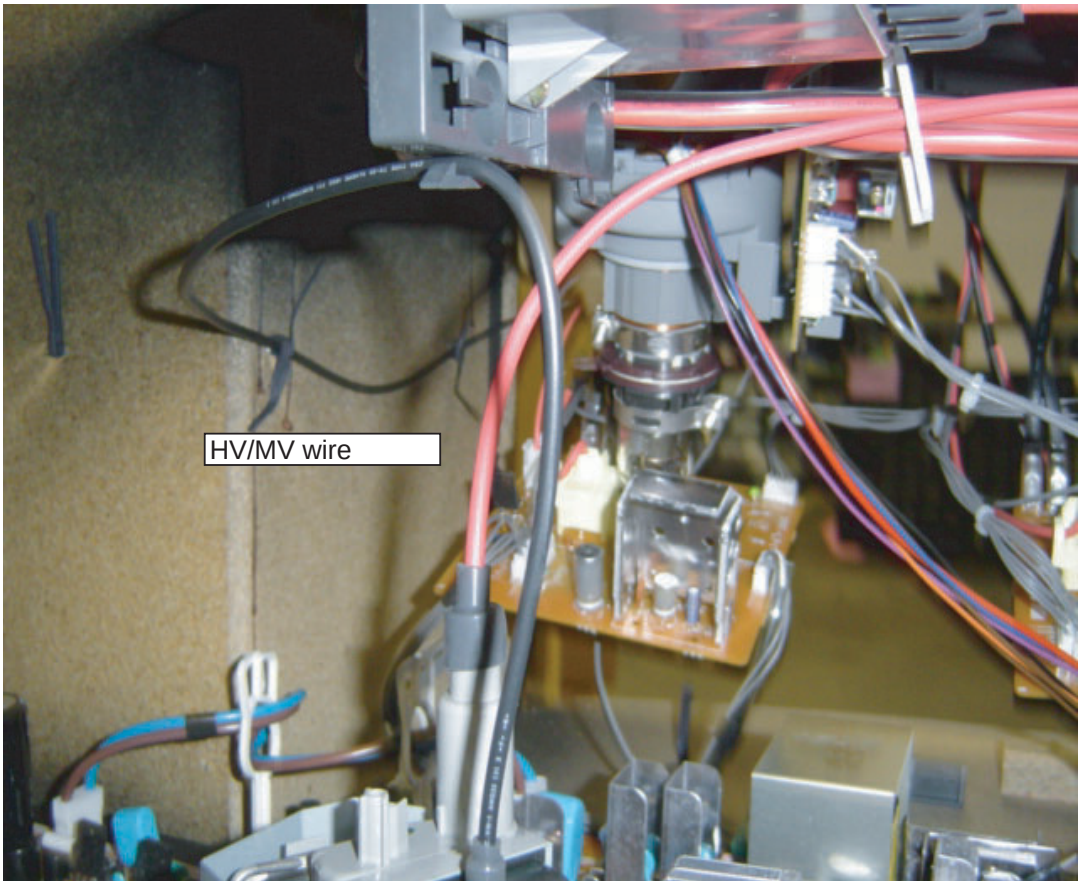
HV Wire



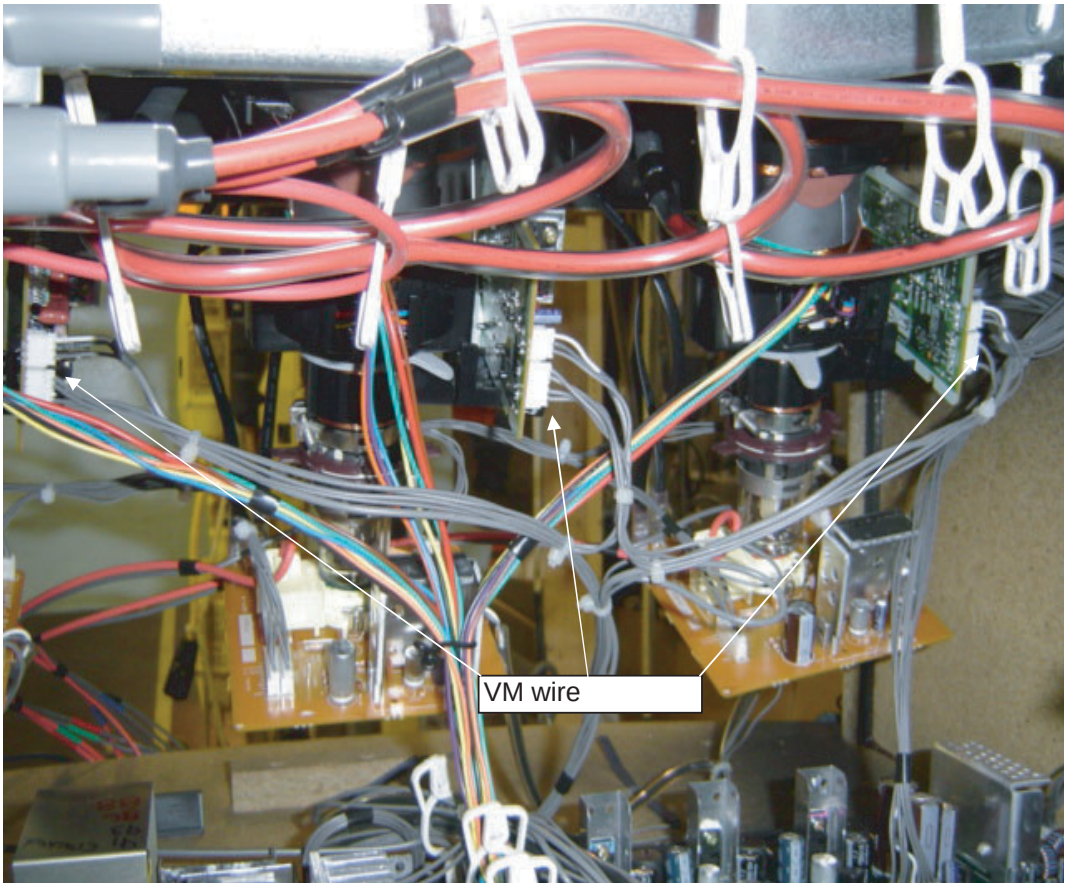
HV Wire



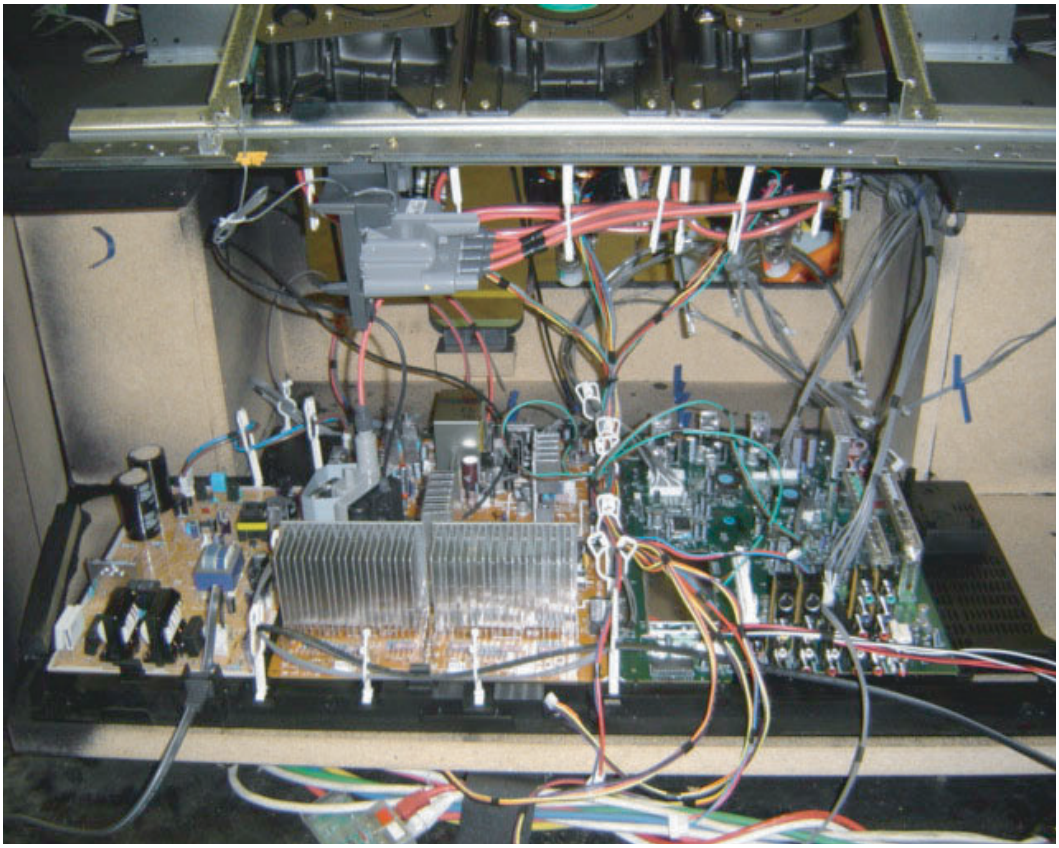
HV/MV Wire



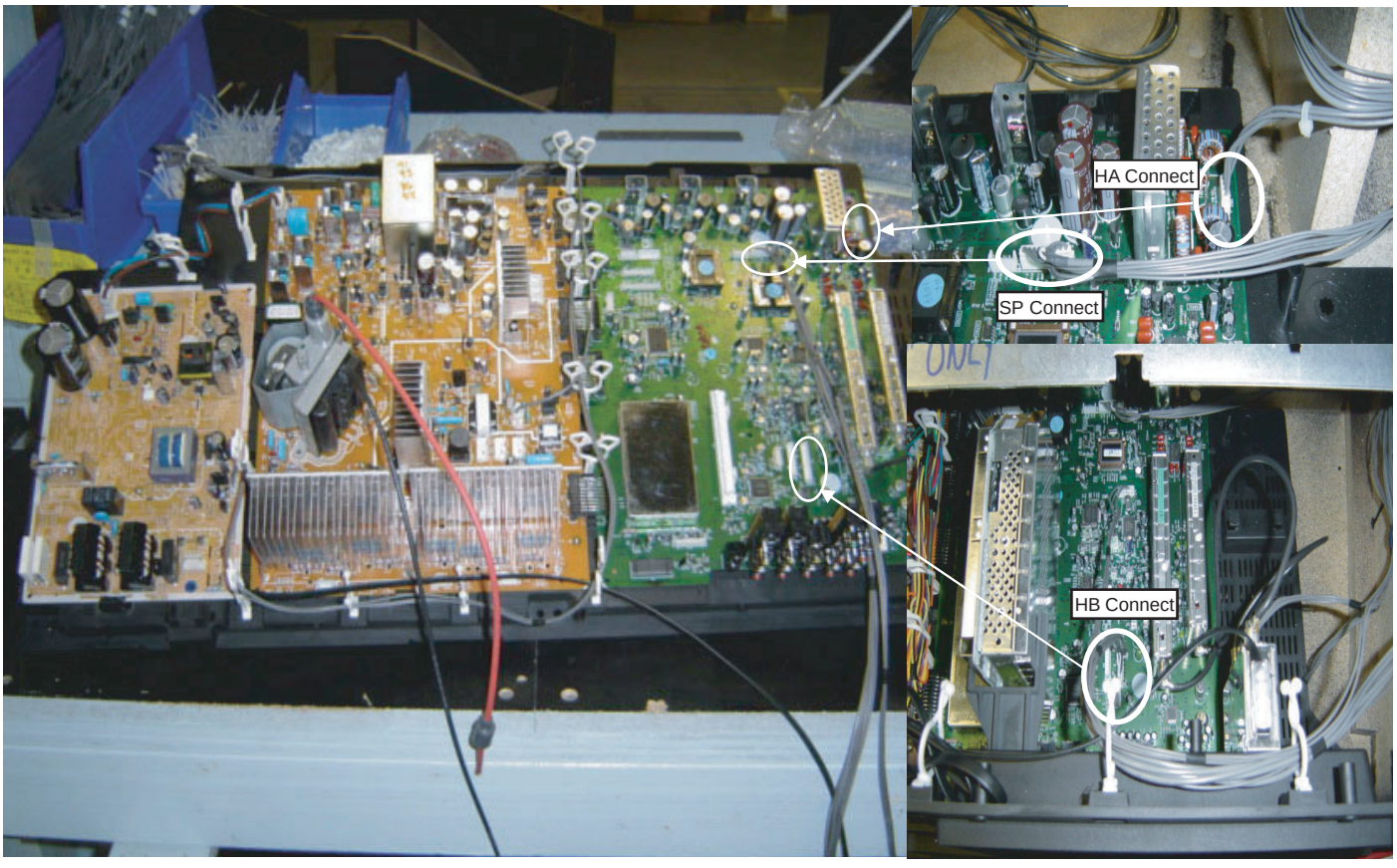
VM Connect



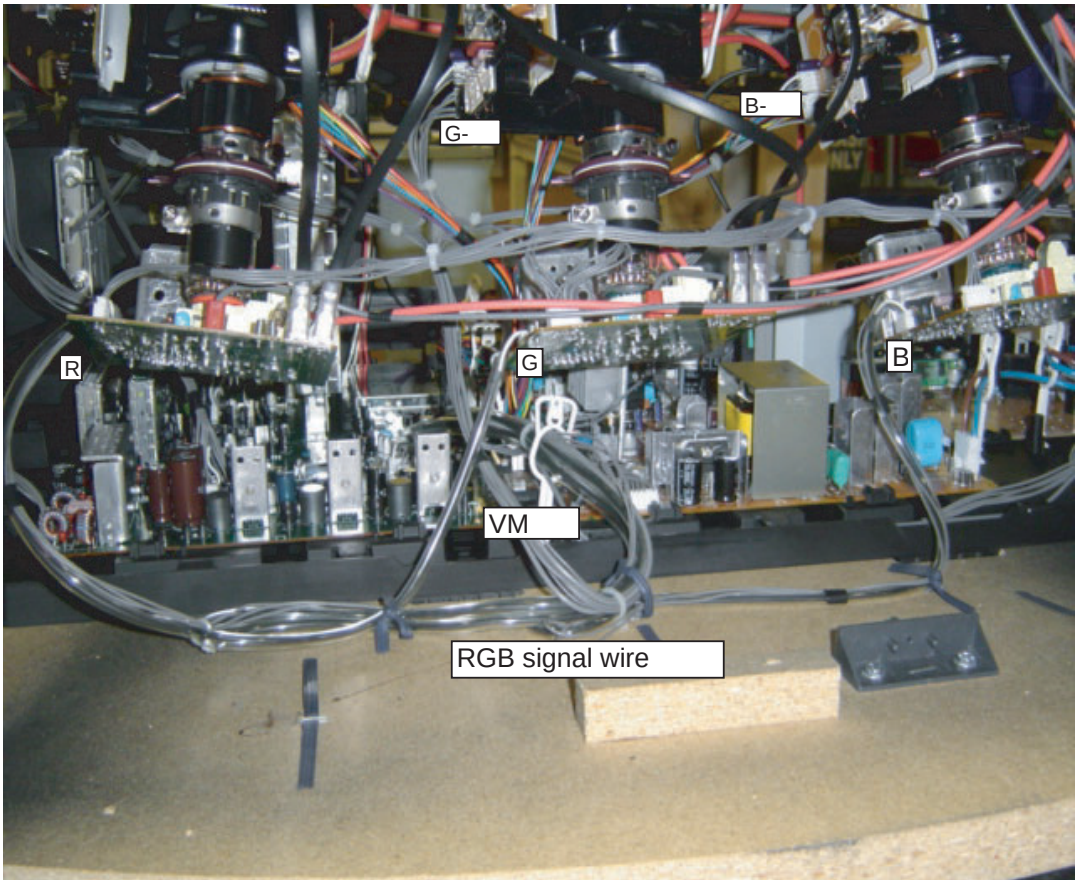
PWB Block Docking



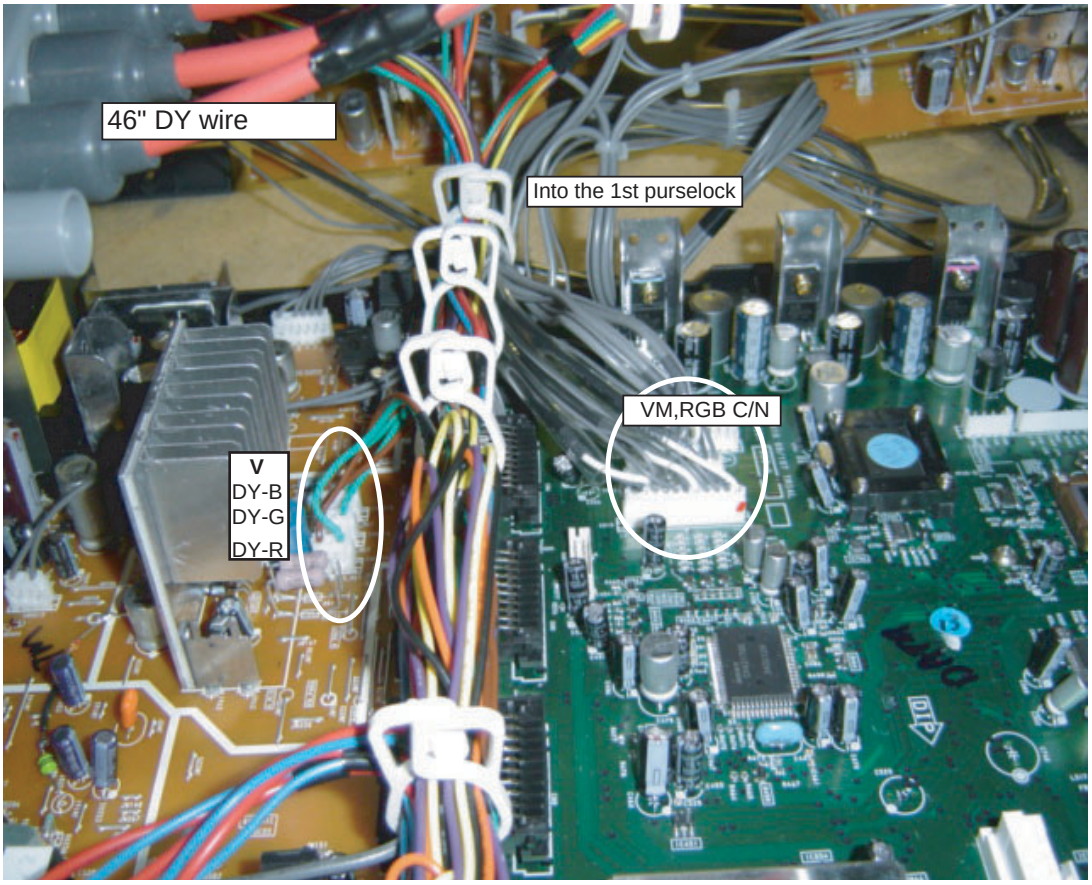
PWB Block Docking



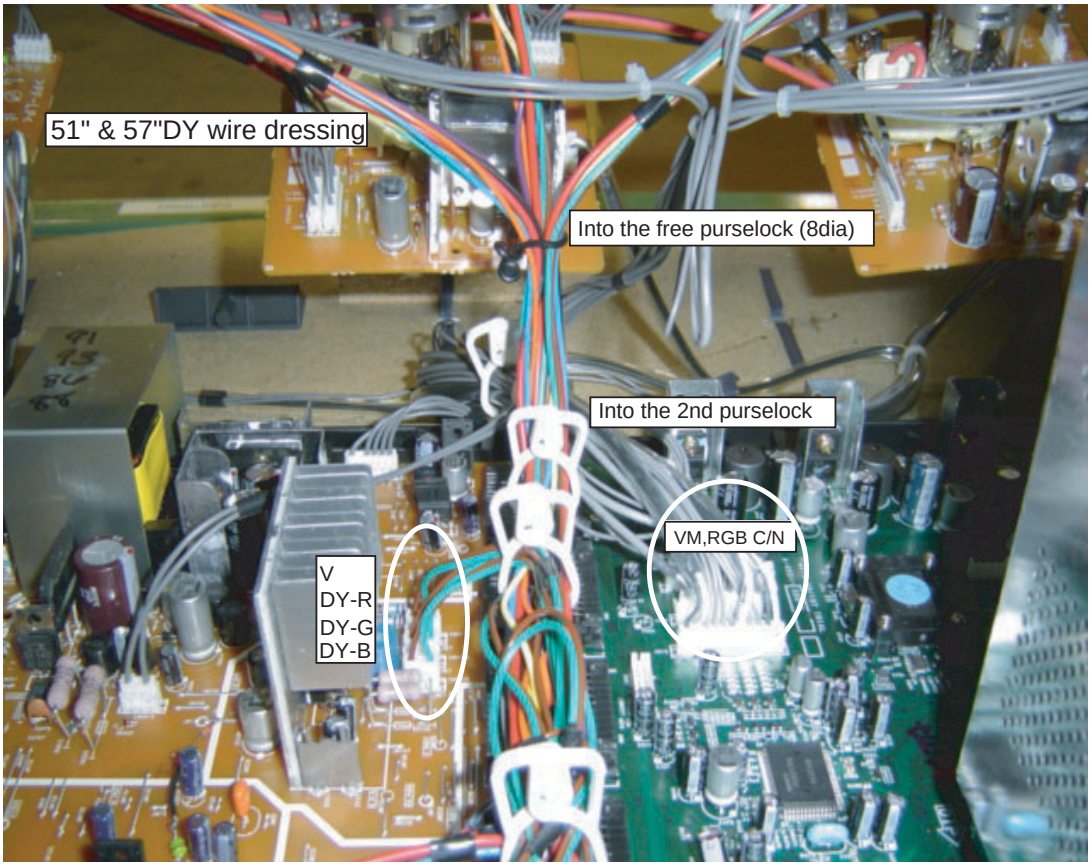
C, FP Connect



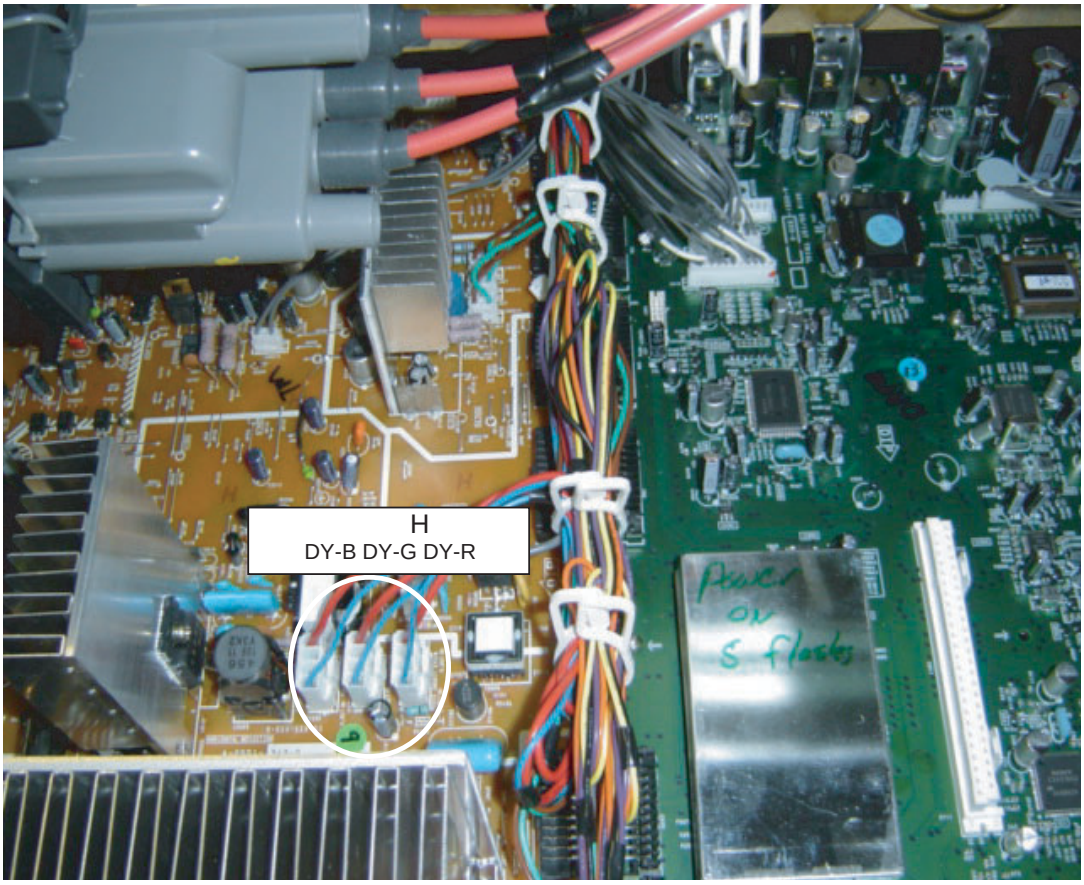
46 DY



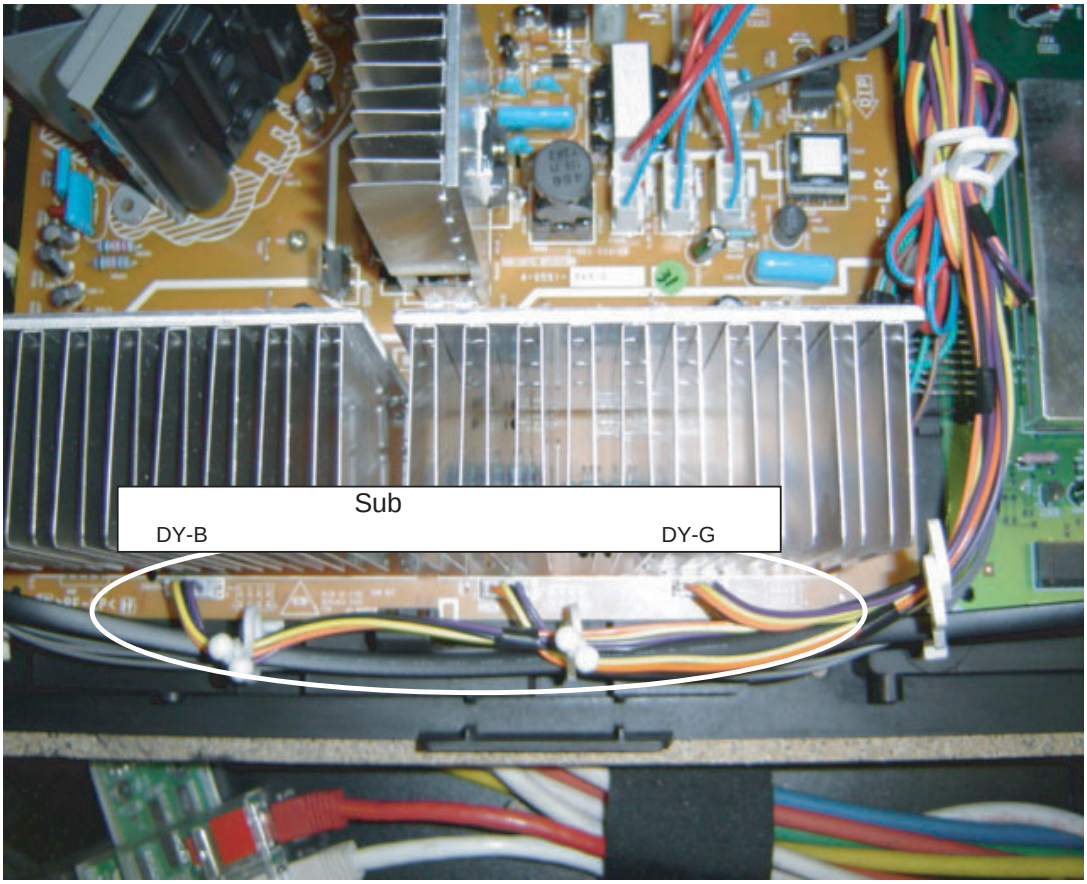
51 & 57 DY


51" & 57"DY wire dressing
Into the free purselock (8dia)
Into the 2nd purselock
VM,RGB C/N
V
DY-R
DY-G
DY-B

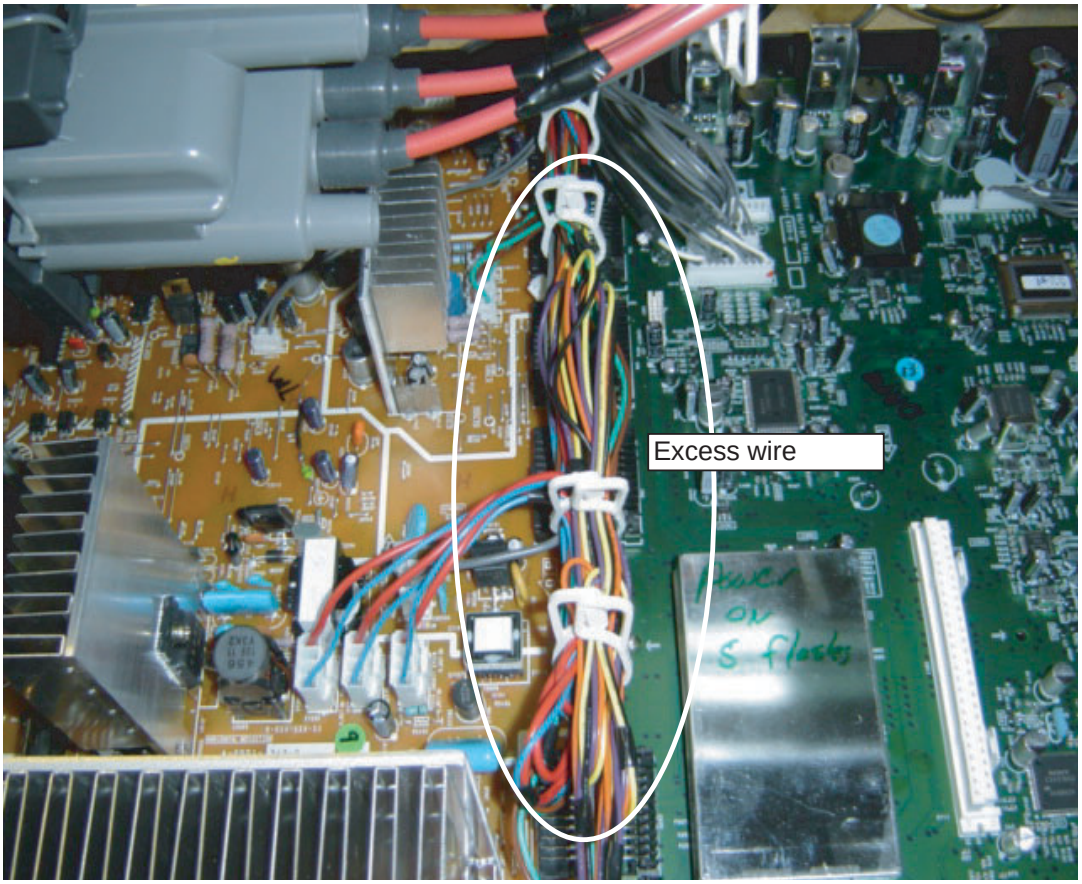
DY


H
DY-B DY-G DY-R

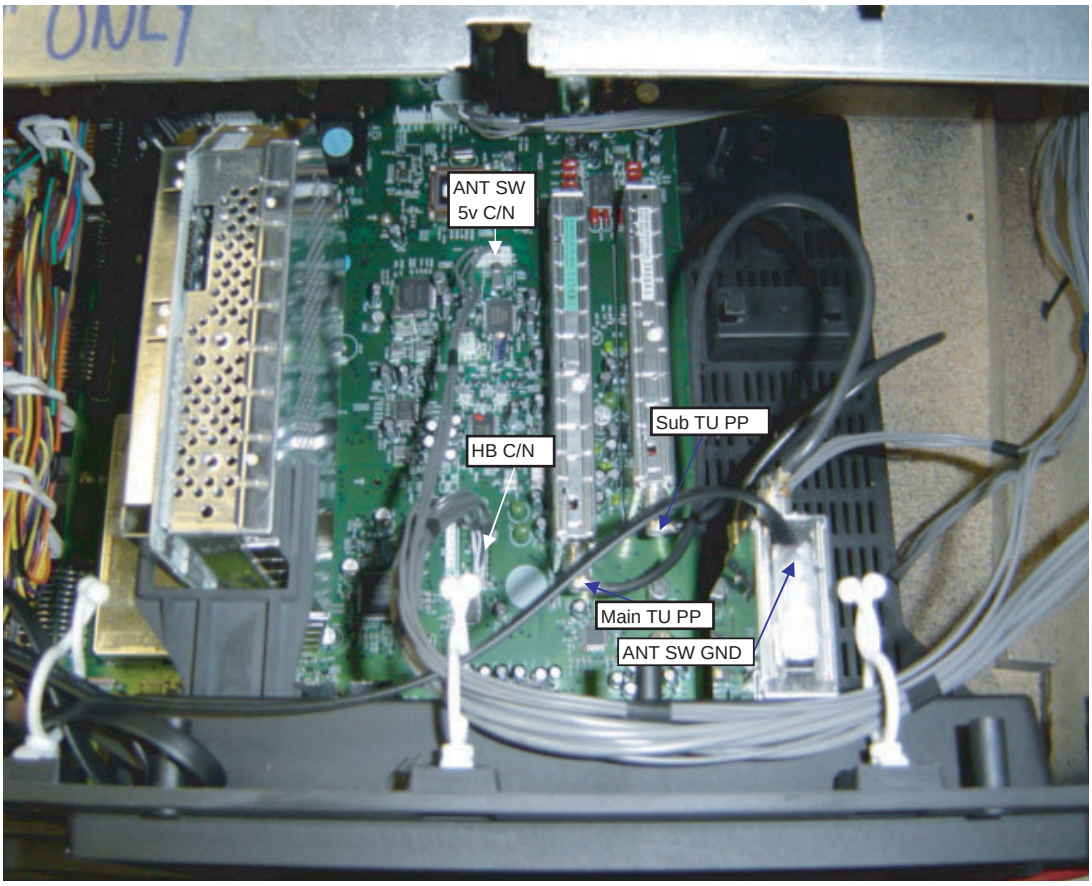
DY



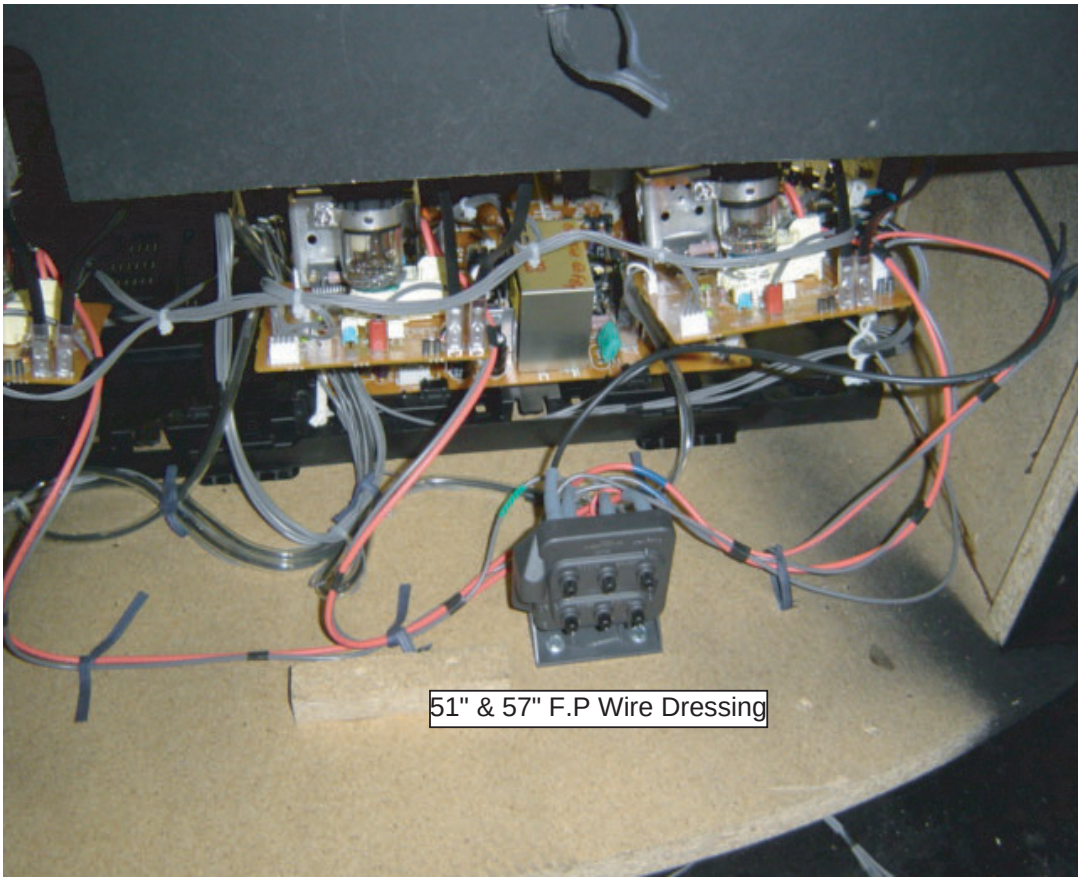
DY



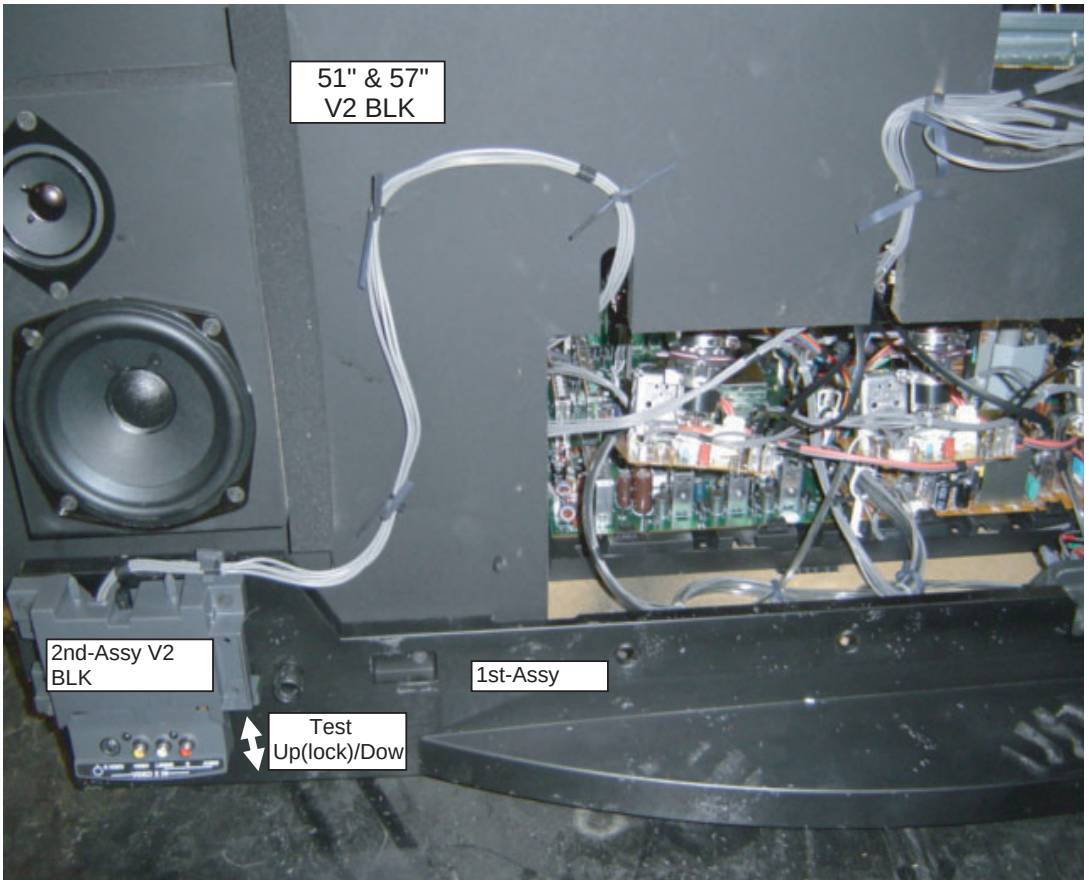
Terminal Bracket Assy



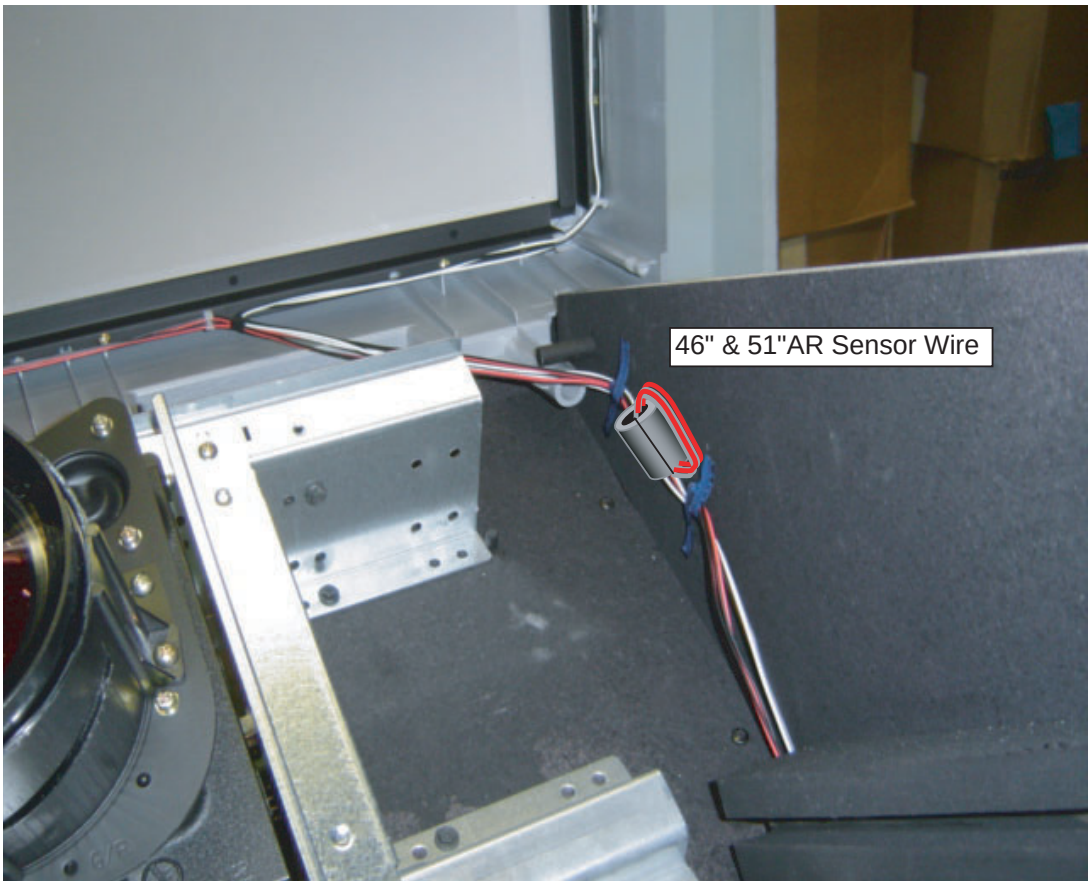
F.P



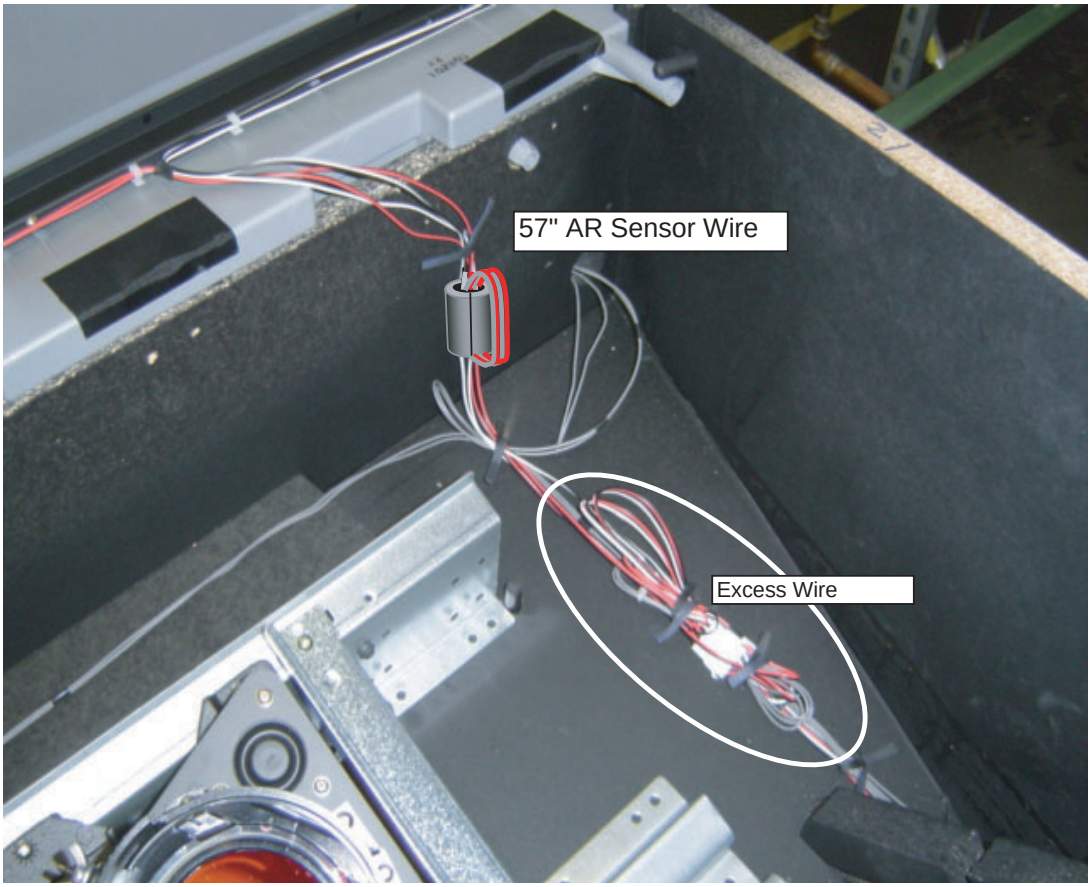
51 & 57 V2 Block Assy



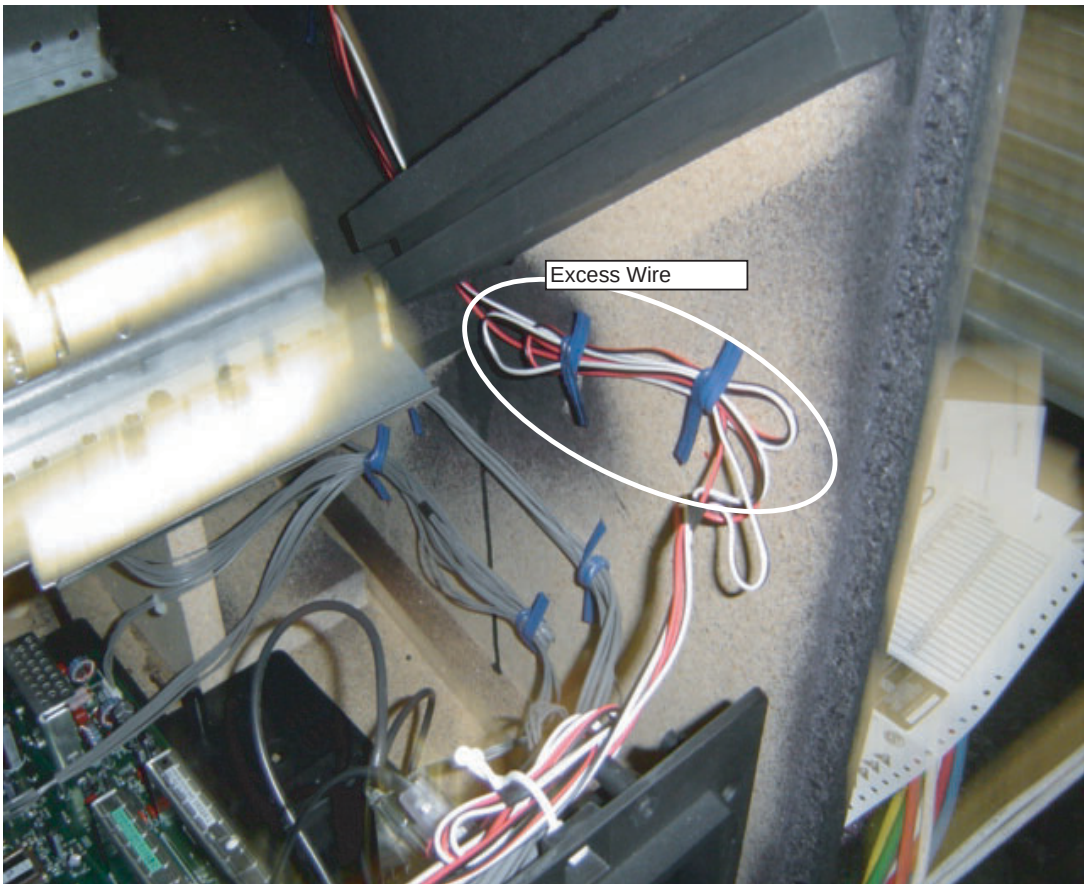
AR Sensor



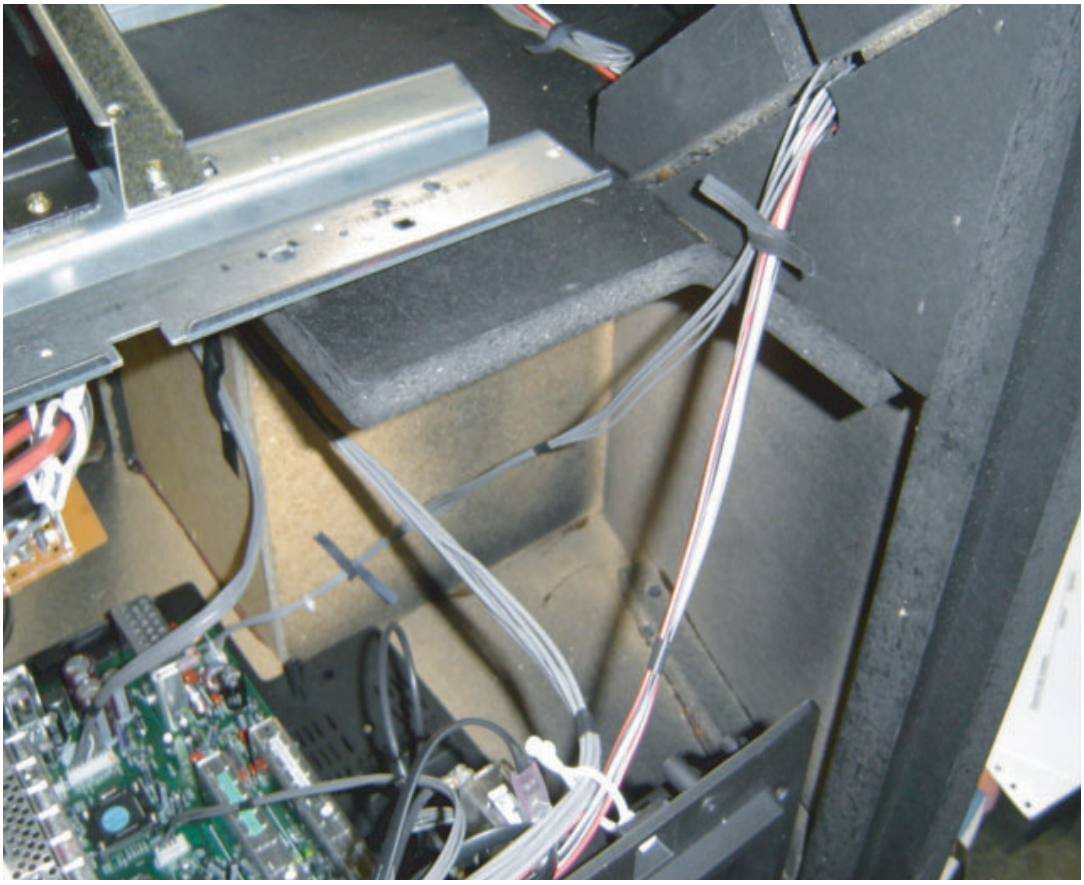
AR Sensor



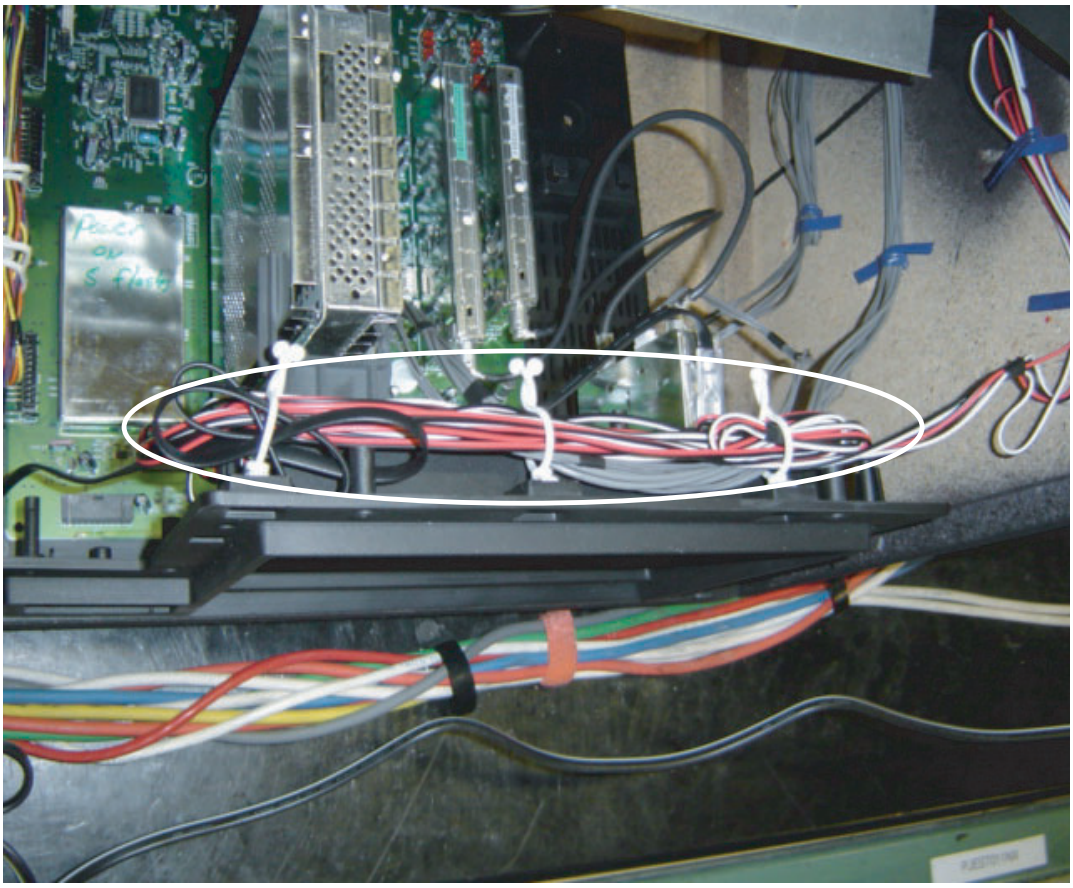
AR Sensor



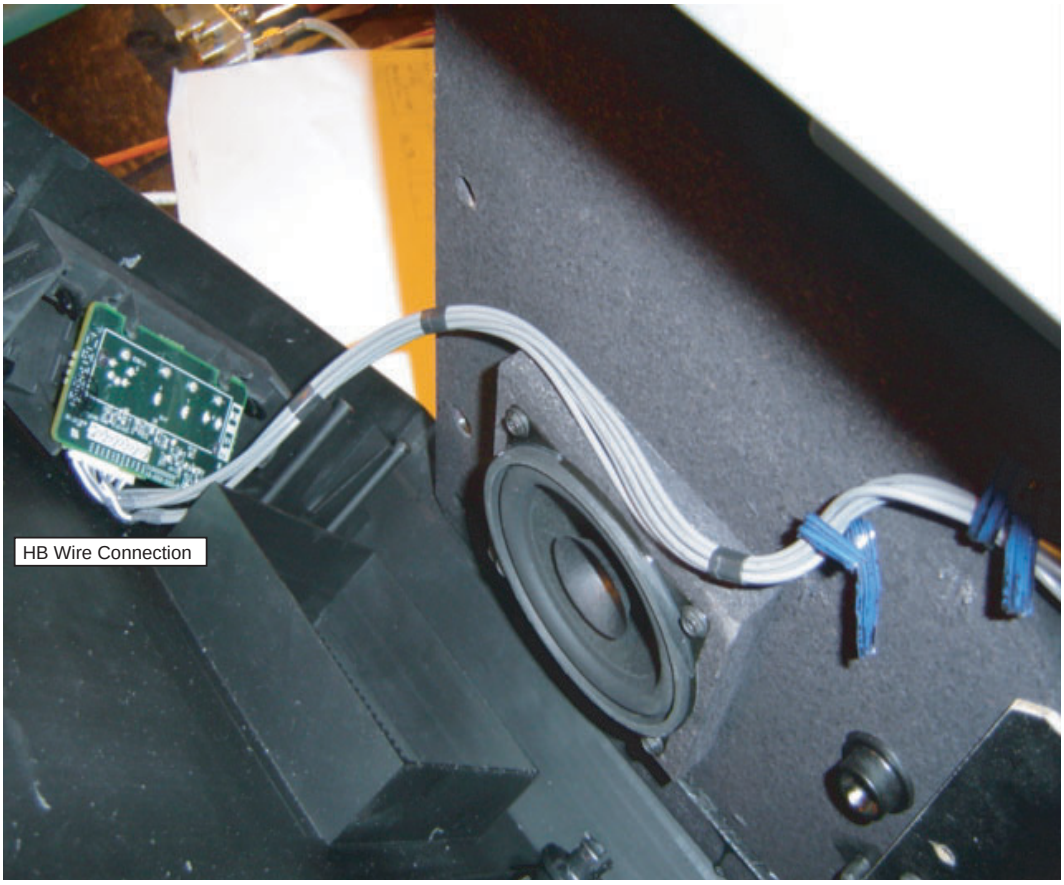
AR Sensor



AR Sensor



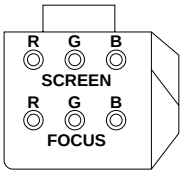
46 V2 Assy



SECTION 2: SET-UP ADJUSTMENTS

2-1. SCREEN VOLTAGE ADJUSTMENT (G2) (COARSE ADJUSTMENT)

1. Receive the Monoscope signal.
2. Set BRIGHTNESS to 50% and PICTURE to minimum.
3. Turn the red VR on the focus block all the way to the left and then gradually turn it to the right until the retrace line is barely visible.
4. Gradually turn the control to the left until the retrace line disappears.

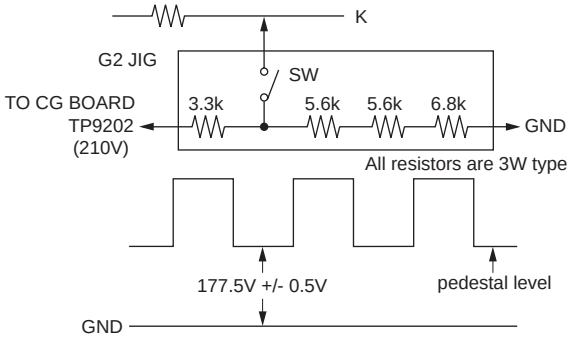


FOCUS Block

2-2. SCREEN (G2) ADJUSTMENT (FINE ADJUSTMENT)

If the jig described below is available, it is recommended that the G2 Fine Mode Adjustment be performed to set the screen controls to their optimal condition. If desired, you can build the jig illustrated below, using 3-watt resistors. Please note that if the proper voltage is not obtained with the listed resistor's values, then increase or decrease one of the values in the resistor network to obtain the correct voltage.

1. Select VIDEO-1 mode no signal applied (the screen must be black).
2. Connect the G2 JIG.
3. SW on JIG.
4. Connect an oscilloscope to the TP9101(KR), TP9201(KG) and TP9301(KB) of CR board, CG board, and CB board.
5. Adjust red, green, and blue screen voltage to 177.5+/-0.5V with screen VR on the focus block.

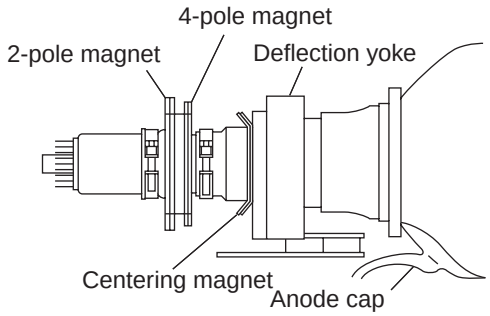


2-3. DEFLECTION YOKE TILT ADJUSTMENT

1. Connect the color bar generator monoscope pattern to Video 1 input.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Loosen the CRT's deflection yoke set screw and align the tilt of the deflection yoke so that the horizontal bars at the center of the cross-hatch pattern are parallel to the top and bottom edges of the screen.
4. After aligning the deflection yoke fasten it securely to the funnel-shaped portion (neck) of the CRT.
5. Cover the green and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 3 and 4 for the red CRT.

   Cover the green and red CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps), then repeat steps 3 and 4 for the blue CRT.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

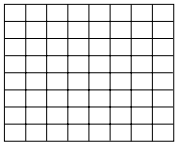


2-4. FOCUS LENS ADJUSTMENT

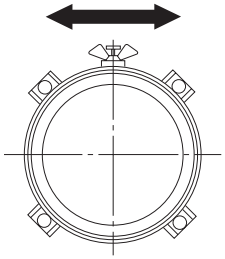
In this adjustment, use the remote commander while in service mode. For details on the usage of the service mode and the remote commander, please refer to section
2-10. ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER.

1. Loosen the lens screw.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Turn the green lens to adjust to the optimum focus point with the crosshatch signal.
4. Tighten the lens screw.
5. Cover the green and blue CRT lenses with the lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
6. Turn the red lens to adjust to the optimum focus point with the crosshatch signal.
7. Tighten the lens screw.
8. Cover the green and red CRT lenses with the lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
9. Turn the blue lens to adjust to the optimum focus point with the crosshatch signal.
10. Tighten the lens screw.
11. After adjusting the items:
    2-5. FOCUS VR ADJUSTMENT,
    2-7. 2-POLE MAGNET ADJUSTMENT,
    2-8. 4-POLE MAGNET ADJUSTMENT,
    reconfirm the optimum focus point and adjust again if necessary.

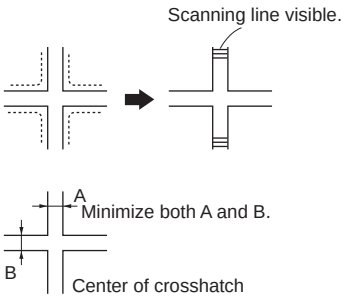
* In PJE mode, every time 6 is pressed, the test signal changes to: "crosshatch+video signal" → "crosshatch+borderline (black)" → "crosshatch (black)" → "dots (black)" → "all white" → off



Test Signal



Lens

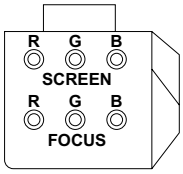


Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

2-5. FOCUS VR ADJUSTMENT

1. Set generator to crosshatch.
2. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
3. Turn the green focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
4. Cover the green and blue picture lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
5. Turn the red focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
6. Cover the green and red picture lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
7. Turn the blue focus VR on the focus block to adjust to the optimum focus point with the crosshatch signal.
8. After adjusting the items:
    2-4. FOCUS LENS ADJUSTMENT,
    2-7. 2-POLE MAGNET ADJUSTMENT,
    2-8. 4-POLE MAGNET ADJUSTMENT,
    reconfirm the optimum focus point and adjust again if necessary.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.



FOCUS Block

2-6. CENTERING MAGNET ADJUSTMENT

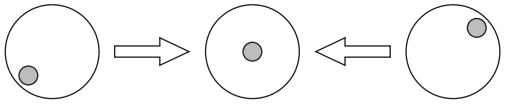
1. Set the mode to PRO.
2. Receive the monoscope signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Adjust the green CRT's centering magnet to put the center of the monoscope signal to the center of the screen.
5. Repeat steps 1 through 4 for the red CRT except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red centering magnet.
6. Repeat steps 1 through 4 for the blue CRT except now you will cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue centering magnet.
7. After 2-Pole and 4-Pole adjustment, entering magnet adjustment needs to be confirmed. If centering magnet is re-adjusted, then 2-Pole magnet will need to be confirmed.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

2-7. 2-POLE MAGNET ADJUSTMENT

1. Set the mode to PRO and picture to MAX.
2. Receive the 100IRE 1080i Dot signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the focus VR on the focus block to the left (counter clockwise) and set it to overfocus to enlarge the spot.
5. Adjust the CRT's 2-pole magnet so that the small bright spot is in the center.
6. Align the focus VR on the focus block and set it for the best focus.
7. Repeat steps 1 through 6 for the red CRT covering the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.
8. Repeat steps 1 through 6 for the blue CRT covering the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue focus control on the focus block.

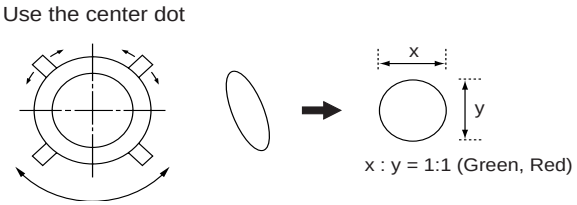
Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.



2-8. 4-POLE MAGNET ADJUSTMENT

1. Set the mode to VIVID and WIDE mode = Zoom, VM:Off.
2. Receive the 100IRE 1080i Dot signal.
3. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the (green) focus VR on the focus block to the right (clockwise) and set it to under-focus to reduce the spot.
5. Adjust the 4-pole magnet so that the small spot in the center of the screen becomes round for green and red.
6. Adjust the blue spot for:
   a. KP-46WT520/51WS520 to a round shape X:Y=1:1
   b. KP-57WS520 to an oval shape X:Y=1.2:1
7. Repeat steps 1 through 6 for the red CRT except now you will cover the green and blue CRT lenses with lens caps to allow only red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the red focus control on the focus block.
8. Repeat steps 1 through 6 for the blue CRT except now you will cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps) and you will adjust the blue focus control on the focus block.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

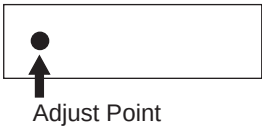


2-9. DEFOCUS ADJUSTMENT (BLUE)

Note: Adjust the blue dot to be slightly larger than red and green dots. This adjustment provides a more pleasing picture to the customer.

1. Set the mode to PRO, PICTURE : Max, COLOR TEMP : Cool.
2. Receive the 100IRE 1080i Dot signal.
3. Cover the red and green CRT lenses with lens caps to allow only blue to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
4. Turn the blue focus VR on the focus block to the right (clockwise) until blue spot is in focus.
5. Change mode to VIVID to confirm Flare level is minimal using cross hatch signal.
6. Set the generator to an all white signal and check uniformity.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.



2-10. ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

All of the circuit adjustments can be made by using the remote commander (RM-Y916).

Note: The following test equipment is required:

1. Pattern Generator (with component outputs)
2. Frequency counter
3. Digital multimeter
4. Audio oscillator

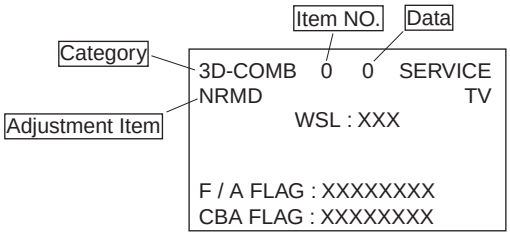
2-10-1. METHOD OF ENTERING THE SERVICE ADJUSTMENT MODE

SERVICE MODE PROCEDURE

1. TV must be in Standby mode. (Power off)
2. Press “DISPLAY”, “5”, “VOL +”, then “POWER” on the remote commander.

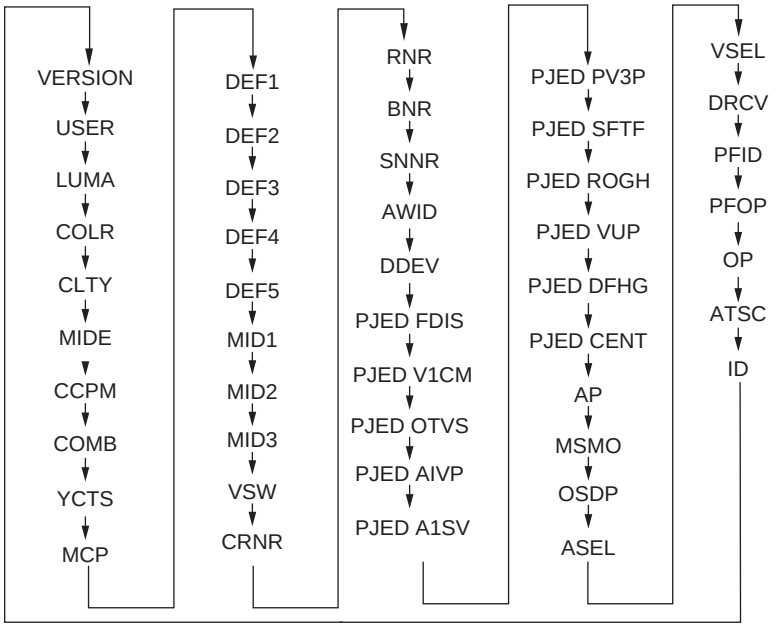
   (Press each button within 1 second of pressing the previous button.)

SERVICE MODE ADJUSTMENT



3. The screen displays the item being adjusted within that category.
4. Press 1 or 4 on the remote commander to select the adjustment item
5. Press 3 or 6 on the remote commander to change the data
6. Press 2 or 5 on the remote commander to select the adjustment category

   Every time you press 2 (Category up), service mode changes in the order shown below:



7. If you want to go back to the most recently saved value, press “0” then “ENTER” to read the memory.
8. Press “MUTING” then “ENTER” to write the new adjustment data into memory.
9. Turn power off when you want to exit the service mode.

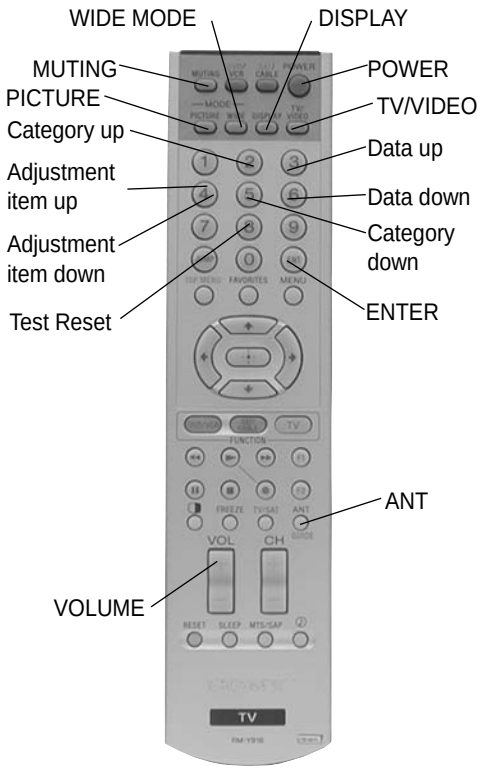
Note:: Press “8” then “ENTER” on the remote commander to restore the factory settings for user controls and channel memories (this will also turn set off and then on to exit the service mode).

2-10-2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, turn the power off with the remote commander.
2. Turn the power ON and set to service mode.
3. Cycle through the adjusted items again and confirm that the adjustments were saved.

2-10-3. ADJUSTING BUTTONS AND INDICATOR

Note: When the PJE mode (which displays an internally generated signal) is activated, several buttons on the remote commander will have different functions than the ones listed below. Therefore, when in the PJE mode, refer to section 2-12-3 for button functions.



RM-Y916

2-11.ADJUSTABLE SERVICE DATA LISTS

Only the Adjustable registers are shown in this data list.

A complete set of the service data, Fixed and Adjustable, can be downloaded at:

http://www-ec.sdp.sel.sony.com/padics/Model_Data_List.htm

Only Sony authorized Service Technician can access this site.

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
OP	5	OSDH	OSD Horizontal Position	(common)	21	21	21	0	255
	6	OSDF	OSD Favorite Position	(common)	28	28	28	0	63

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
CCPM	1	YLEV	Y Level	RF - 60HZ	205	205	205	0	255
				CV - 60HZ	190	190	190	0	255
	2	CLEV	C Level	RF - 60HZ	110	110	110	0	255
				CV - 60HZ	103	103	103	0	255
	3	SHUE	Sub Hue	RF - 60HZ	7	7	7	0	15
				CV - 60HZ	7	7	7	0	15
YCTS (CXA2103)	2	SCON	Sub Contrast	RF	9	9	9	0	15
				OTHER	6	6	6	0	15
	3	SCOL	Sub Color	RF	6	6	6	0	15
				OTHER	5	5	5	0	15
	4	SHUE	Sub Hue	RF	3	3	3	0	15
				OTHER	5	5	5	0	15
MCP	9	CBOF	Cb Offset	DRC - RF/BS/CV/YC	31	31	31	0	63
	10	CROF	Cr Offset	DRC - RF/BS/CV/YC	30	30	30	0	63
DEF1	0	VPOS	Vertical Position	COMMON	25	25	25	0	63
	1	VSIZ	Vertical Size	COMMON	31	31	31	0	63
DEF2	2	HSIZ	Horizontal Size	WIDEZOOM	24	24	24	0	63
				OTHER	24	24	24	0	63
	3	SLIN	S Linearity	WIDEZOOM	7	7	7	0	15
				OTHER	7	7	7	0	15
COLR	2	RDRV	Red Drive Gain	COMMON	38	38	38	0	63
	4	BDRV	Blue Drive Gain	COMMON	23	23	23	0	63
	5	RCUT	Red cut-off	COMMON	23	23	23	0	63
	7	BCUT	Blue cut-off	COMMON	27	27	27	0	63
	8	SBRT	Sub Bright	COMMON	23	23	23	0	63

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	93	R0GH	Ratio Offset S0 G H	(common)	0	0	0	-128	127
	94	R0RH	Ratio Offset S0 R H	(common)	0	0	0	-128	127
	95	R0BH	Ratio Offset S0 B H	(common)	0	0	0	-128	127
	96	R1GH	Ratio Offset S1 G H	(common)	0	0	0	-128	127
	97	R1RH	Ratio Offset S1 R H	(common)	0	0	0	-128	127
	98	R1BH	Ratio Offset S1 B H	(common)	0	0	0	-128	127
	99	R2GH	Ratio Offset S2 G H	(common)	0	0	0	-128	127
	100	R2RH	Ratio Offset S2 R H	(common)	0	0	0	-128	127
	101	R2BH	Ratio Offset S2 B H	(common)	0	0	0	-128	127
	102	R3GH	Ratio Offset S3 G H	(common)	0	0	0	-128	127
	103	R3RH	Ratio Offset S3 R H	(common)	0	0	0	-128	127
	104	R3BH	Ratio Offset S3 B H	(common)	0	0	0	-128	127
	105	R1GV	Ratio Offset S1 G V	(common)	0	0	0	-128	127
	106	R1RV	Ratio Offset S1 R V	(common)	0	0	0	-128	127
	107	R1BV	Ratio Offset S1 B V	(common)	0	0	0	-128	127
	108	R2GV	Ratio Offset S2 G V	(common)	0	0	0	-128	127
	109	R2RV	Ratio Offset S2 R V	(common)	0	0	0	-128	127
	110	R2BV	Ratio Offset S2 B V	(common)	0	0	0	-128	127
	111	PTRH	Pattern Offset Top R H	(common)	0	0	0	-128	127
	112	PTBH	Pattern Offset Top B H	(common)	0	0	0	-128	127
	113	PLRH	Pattern Offset Left R H	(common)	0	0	0	-128	127
	114	PLBH	Pattern Offset Left B H	(common)	0	0	0	-128	127
	115	PLRV	Pattern Offset Left R V	(common)	0	0	0	-128	127
	116	PLBV	Pattern Offset Left B V	(common)	0	0	0	-128	127
	117	PRRH	Pattern Offset Right R H	(common)	0	0	0	-128	127
	118	PRBH	Pattern Offset Right B H	(common)	0	0	0	-128	127
	119	PRGV	Pattern Offset Right G V	(common)	0	0	0	-128	127
	120	PRRV	Pattern Offset Right R V	(common)	0	0	0	-128	127
	121	PRBV	Pattern Offset Right B V	(common)	0	0	0	-128	127
	122	PBGH	Pattern Offset Bottom G H	(common)	0	0	0	-128	127
	123	PBRH	Pattern Offset Bottom R H	(common)	0	0	0	-128	127
	124	PBBH	Pattern Offset Bottom B H	(common)	0	0	0	-128	127
	125	ERR	Auto Regi Error Code	(common)	0	0	0	0	255
	130	VUP	Auto Regi V Upper Pattern Position	(common)	50	50	50	0	2047
	131	VMID	Auto Regi V Middle Pattern Position	(common)	495	495	495	0	2047
	132	VLOW	Auto Regi V Lower Pattern Position	(common)	947	947	947	0	2047
	133	HLE	Auto Regi H Left Pattern Position	(common)	181	181	181	0	2047
	134	HMID	Auto Regi H Middle Pattern Position	(common)	853	853	853	0	2047
	135	HRIT	Auto Regi H Right Pattern Position	(common)	1522	1522	1522	0	2047

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	141	CENT	R H Cent	Full / Normal	40	40	40	-512	511
				Zoom	40	40	40	-512	511
				WideZoom	40	40	40	-512	511
				1080i Full / Normal	40	40	40	-512	511
				1080i Zoom	40	40	40	-512	511
				1080i WideZoom	40	40	40	-512	511
			R V Cent	Full / Normal	20	20	20	-512	511
				Zoom	20	20	20	-512	511
				WideZoom	20	20	20	-512	511
				1080i Full / Normal	20	20	20	-512	511
				1080i Zoom	20	20	20	-512	511
				1080i WideZoom	20	20	20	-512	511
			G H Cent	Full / Normal	40	40	40	-512	511
				Zoom	40	40	40	-512	511
				WideZoom	40	40	40	-512	511
				1080i Full / Normal	40	40	40	-512	511
				1080i Zoom	40	40	40	-512	511
				1080i WideZoom	40	40	40	-512	511
			G V Cent	Full / Normal	20	20	20	-512	511
				Zoom	20	20	20	-512	511
				WideZoom	20	20	20	-512	511
				1080i Full	20	20	20	-512	511
				1080i Zoom	20	20	20	-512	511
				1080i WideZoom	20	20	20	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	141		B H Cent	Full / Normal	40	40	40	-512	511
				Zoom	40	40	40	-512	511
				WideZoom	40	40	40	-512	511
				1080i Full / Normal	40	40	40	-512	511
				1080i Zoom	40	40	40	-512	511
				1080i WideZoom	40	40	40	-512	511
			B V Cent	Full / Normal	20	20	20	-512	511
				Zoom	20	20	20	-512	511
				WideZoom	20	20	20	-512	511
				1080i Full / Normal	20	20	20	-512	511
				1080i Zoom	20	20	20	-512	511
				1080i WideZoom	20	20	20	-512	511
	142	SIZE	R H Size	Full / Normal	-120	-120	-120	-512	511
				Zoom	-120	-120	-120	-512	511
				WideZoom	-120	-120	-120	-512	511
				1080i Full / Normal	-120	-120	-120	-512	511
				1080i Zoom	-120	-120	-120	-512	511
				1080i WideZoom	-120	-120	-120	-512	511
			R V Size	Full / Normal	-80	-80	-80	-512	511
				Zoom	-80	-80	-80	-512	511
				WideZoom	-80	-80	-80	-512	511
				1080i Full / Normal	-80	-80	-80	-512	511
				1080i Zoom	-80	-80	-80	-512	511
				1080i WideZoom	-80	-80	-80	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	142	SIZE	G H Size	Full / Normal	-120	-120	-120	-512	511
				Zoom	-120	-120	-120	-512	511
				WideZoom	-120	-120	-120	-512	511
				1080i Full / Normal	-120	-120	-120	-512	511
				1080i Zoom	-120	-120	-120	-512	511
				1080i WideZoom	-120	-120	-120	-512	511
			G V Size	Full / Normal	-80	-80	-80	-512	511
				Zoom	-80	-80	-80	-512	511
				WideZoom	-80	-80	-80	-512	511
				1080i Full / Normal	-80	-80	-80	-512	511
				1080i Zoom	-80	-80	-80	-512	511
				1080i WideZoom	-80	-80	-80	-512	511
			B H Size	Full / Normal	-120	-120	-120	-512	511
				Zoom	-120	-120	-120	-512	511
				WideZoom	-120	-120	-120	-512	511
				1080i Full / Normal	-120	-120	-120	-512	511
				1080i Zoom	-120	-120	-120	-512	511
				1080i WideZoom	-120	-120	-120	-512	511
			B V Size	Full / Normal	-80	-80	-80	-512	511
				Zoom	-80	-80	-80	-512	511
				WideZoom	-80	-80	-80	-512	511
				1080i Full / Normal	-80	-80	-80	-512	511
				1080i Zoom	-80	-80	-80	-512	511
				1080i WideZoom	-80	-80	-80	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	143	LIN	R H Lin	Full / Normal	300	300	300	-512	511
				Zoom	300	300	300	-512	511
				WideZoom	300	300	300	-512	511
				1080i Full / Normal	300	300	300	-512	511
				1080i Zoom	300	300	300	-512	511
				1080i WideZoom	300	300	300	-512	511
			R V Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G H Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	143	LIN	B H Lin	Full / Normal	-300	-300	-300	-512	511
				Zoom	-300	-300	-300	-512	511
				WideZoom	-300	-300	-300	-512	511
				1080i Full / Normal	-300	-300	-300	-512	511
				1080i Zoom	-300	-300	-300	-512	511
				1080i WideZoom	-300	-300	-300	-512	511
			B V Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
	144	SKEW	R H Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			R V Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	144	SKEW	G H Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B H Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B V Skew	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	145	BOW	R H Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			R V Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G H Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	145	BOW	B H Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B V Bow	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
	146	KEY	R H Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			R V Key	Full / Normal	130	130	130	-512	511
				Zoom	130	130	130	-512	511
				WideZoom	130	130	130	-512	511
				1080i Full / Normal	130	130	130	-512	511
				1080i Zoom	130	130	130	-512	511
				1080i WideZoom	130	130	130	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	146	KEY	G H Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B H Key	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B V Key	Full / Normal	-130	-130	-130	-512	511
				Zoom	-130	-130	-130	-512	511
				WideZoom	-130	-130	-130	-512	511
				1080i Full / Normal	-130	-130	-130	-512	511
				1080i Zoom	-130	-130	-130	-512	511
				1080i WideZoom	-130	-130	-130	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	147	PIN	R H Pin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			R V Pin	Full / Normal	380	380	380	-512	511
				Zoom	380	380	380	-512	511
				WideZoom	380	380	380	-512	511
				1080i Full / Normal	380	380	380	-512	511
				1080i Zoom	380	380	380	-512	511
				1080i WideZoom	380	380	380	-512	511
			G H Pin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G V Pin	Full / Normal	430	430	430	-512	511
				Zoom	430	430	430	-512	511
				WideZoom	430	430	430	-512	511
				1080i Full / Normal	430	430	430	-512	511
				1080i Zoom	430	430	430	-512	511
				1080i WideZoom	430	430	430	-512	511

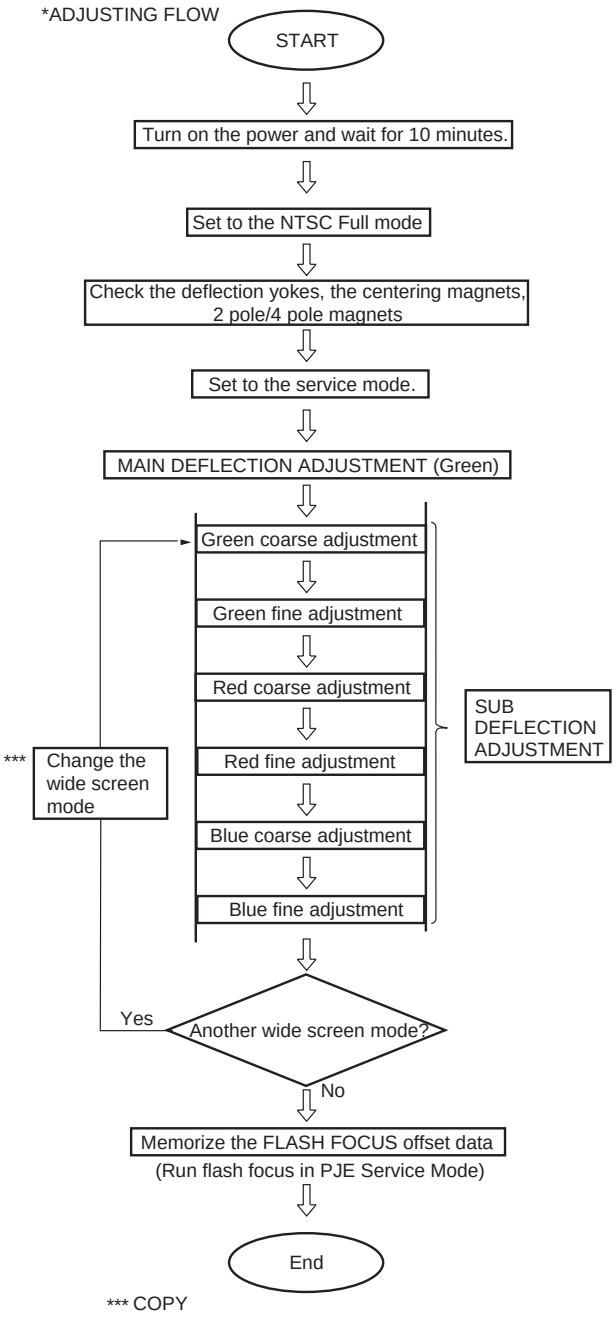
CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	147	PIN	B H Pin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B V Pin	Full / Normal	380	380	380	-512	511
				Zoom	380	380	380	-512	511
				WideZoom	380	380	380	-512	511
				1080i Full / Normal	380	380	380	-512	511
				1080i Zoom	380	380	380	-512	511
				1080i WideZoom	380	380	380	-512	511
	148	MLIN	R H Middle Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G H Middle Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
PJE	148	MLIN	B H Middle Lin	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
	149	MSIZ	R H Middle Size	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			G H Middle Size	Full / Normal	0	0	0	-512	511
				Zoom	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full / Normal	0	0	0	-512	511
				1080i Zoom	0	0	0	-512	511
				1080i WideZoom	0	0	0	-512	511
			B H Middle Size	Full / Normal	0	0	0	-512	511
				Zoom / V.Comp	0	0	0	-512	511
				WideZoom	0	0	0	-512	511
				1080i Full	0	0	0	-512	511
				1080i Full	0	0	0	-512	511
				1080i V.Comp	0	0	0	-512	511

2-11-1. ID MAP TABLE

CATEGORY	#	ITEM	DESCRIPTION	CONDITION	SERVICE DATA (dec)				
					51WS520 (U/C)	57WS520 (U/C)	46WT520 (U/C)	MIN	MAX
ID	0	ID0	ID Byte 0	(common)	89	89	89	0	255
	1	ID1	ID Byte 1	(common)	255	255	255	0	255
	2	ID2	ID Byte 2	(common)	239	239	239	0	255
	3	ID3	ID Byte 3	(common)	106	106	106	0	255
	4	ID4	ID Byte 4	(common)	75	75	75	0	255
	5	ID5	ID Byte 5	(common)	243	243	243	0	255
	6	ID6	ID Byte 6	(common)	190	190	190	0	255
	7	ID7	ID Byte 7	(common)	155	155	155	0	255

2-12. REGISTRATION ADJUSTMENT (PJE MODE ONLY)


*ADJUSTING FLOW
START
Turn on the power and wait for 10 minutes.
Set to the NTSC Full mode
Check the deflection yokes, the centering magnets, 2 pole/4 pole magnets
Set to the service mode.
MAIN DEFLECTION ADJUSTMENT (Green)
Green coarse adjustment
Green fine adjustment
Red coarse adjustment
Red fine adjustment
Blue coarse adjustment
Blue fine adjustment
SUB DEFLECTION ADJUSTMENT
*** Change the wide screen mode
Yes
Another wide screen mode?
No
Memorize the FLASH FOCUS offset data
(Run flash focus in PJE Service Mode)
End
*** COPY

When the NTSC Full mode adjustment has finished, copy its data to NTSC Zoom, HD Full, and HD Zoom modes the first time only and be sure to adjust in the order given.

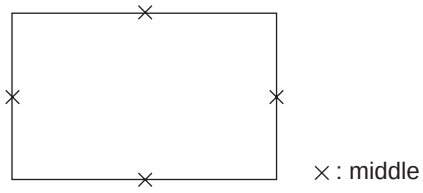
When the NTSC Wide Zoom mode adjustment has finished, copy its data to HD Wide Zoom mode.

This will serve as a starting point for adjusting these other modes. See section 2-13-2. Copying All Registration Data To Other Modes for more information.

2-12-1. SETUP FOR ADJUSTMENT

MARKING

- At the 4 sides of the screen, locate the middle. Use a tape measure to identify the middle.



DATA SETTING

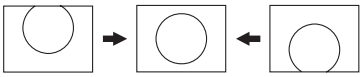
1. Set NTSC Full mode.
2. Enter the service mode, and select “PJE”.

2-12-2. MAIN DEFLECTION ADJUSTMENT

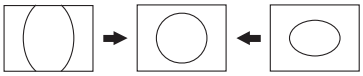
NOTE: Before this adjustment, refer to section 2-11 SERVICE DATA LISTS for PJE item #141-149 input data.

1. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Enter the monoscope signal and set to NTSC Full mode.
3. Enter the service mode, and select “DEF1”.
4. Adjust “0 VPOS” and “1 VSIZ” so that the picture is displayed in the center of the screen.

0 VPOS



1 V-Size

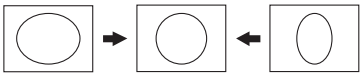


5. Select “DEF2” and adjust “2 H-Size” so that the picture size is within the specification.

SPEC Overscan Spec. = 9%

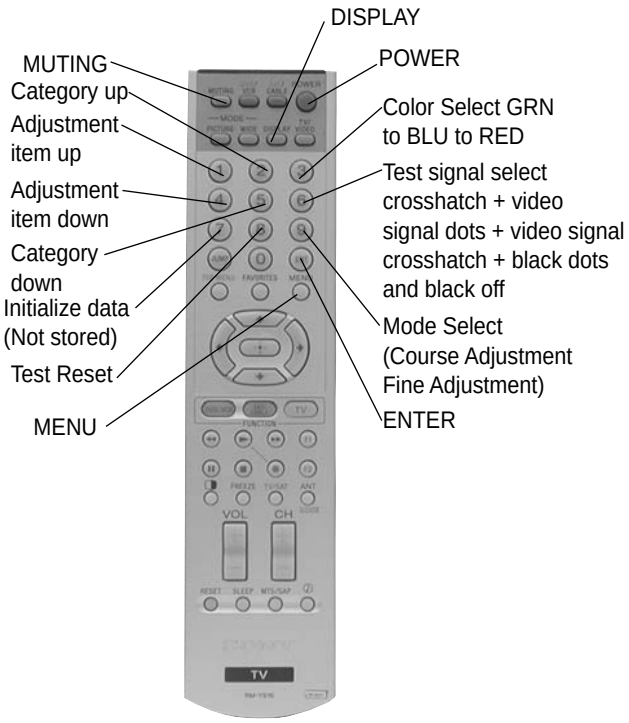
Input Signal	H SIZE	V SIZE
Monoscope	15.6 ± 0.2 sq.	11.5 ± 0.2 sq.

2 H-Size



6. Copy the data of the NTSC Full mode to the other wide screen mode and, if necessary, adjust in the other mode.

2-12-3. OPERATION METHOD FOR PROJECTOR ENGINE MODE



RM-Y916

1. FUNCTION OF KEYS ON COMMANDER

① Changes adjustment item. (Item # moves up)
Marker moves clockwise from center to outside.
(In Fine Adjustment mode)

④ Changes adjustment item. (Item # moves down)
Marker moves counter clockwise from outside to center.
(In Fine Adjustment mode)

② Changes adjustment category.
(Category # moves up)

⑤ Changes adjustment category.
(Category # moves down)

Joystick Changes data value. (Up or down)
Marker moves clockwise from center
(up, down, right, and then left) to outside.
(In Fine Adjustment mode)

③ Changes adjustment color.
GRN →BLU →RED

⑥ Displays or changes internal test signals.
crosshatch + external signal →
crosshatch + borderline →
crosshatch only →
dot only → off

⑨ Switches adjustment mode.
Coarse adjustment model →
Fine adjustment point mode →
Fine adjustment row mode →
Fine adjustment column mode

Press Switches marker moving method.

Joystick (In Fine Adjustment mode)

Pressing down on the joystick in Fine Adjustment mode switches between selecting and un-selecting a point.

When a point is selected, the cursor changes to that color to indicate the point is selected and can be adjusted. If a point is not selected the cursor is white.

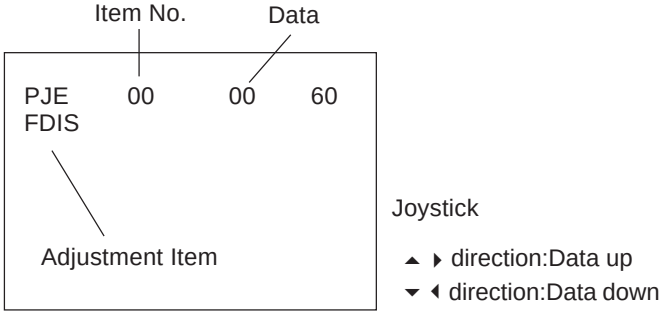
Joystick ▲ ▼ ◀ ▶ keys → **1** and **4** buttons

Commander Function

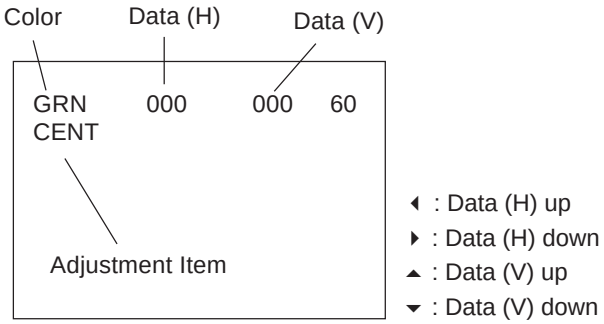
Buttons	Mode	Description
0 + ENTER	READ	Reads data to NVM.
MUTING+ENTER	WRITE	Writes data from NVM.
7 + ENTER	PJE INITIAL	Service data initialization. Not stored. (Be sure not to use usually)

2. OPERATION METHOD FOR COARSE ADJUSTMENT

1. Enter the service mode and select “PJE”.
2. Press the “1” or “4” button on the remote commander to select the item, and then use the joystick to change the data.



3. Select “GRN CENT”. When BLU or RED is displayed, press the “3” button on the remote commander to change the adjustment color in the order of GRN →BLU →RED.
4. In the GRN, BLU, or RED mode, move the joystick ▲ or ▼ to change the data in vertical direction, or ◀ or ▶ to change the data in a horizontal direction.

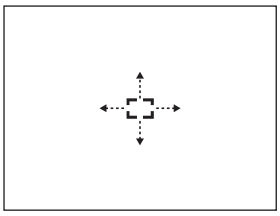


5. Before returning to the service mode, press the “MUTING” + “ENTER” buttons on the remote commander to write the data. (You must complete step 5 to write the data. If you omit step 5 the set data is returned to the data prior to the adjustment.)

3. OPERATION METHOD FOR FINE ADJUSTMENT

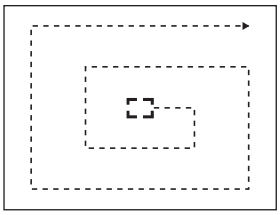
1. Enter the service mode and select “PJE”.
2. Select FDIS and set the data to “01” so that the data at each position can be displayed in fine adjustment mode.
3. Press the “9” button on the remote commander and fine adjustment mode will be active where a green marker appears in the center of the screen. (In the case of GRN mode)
4. Press down on the joystick, and the marker color will be alternately switched between green (GRN mode) and white.
5. Press the “1” or “4” button on the remote commander or use the joystick to move the marker to the position to be adjusted, where fine adjustment can be made.

* When the marker color is white:
(in this case, fine adjustment is disabled)



Use the joystick to move the marker up, down, left, or right.

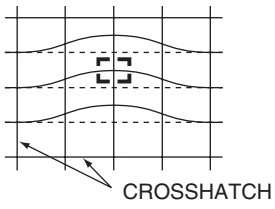
* When the marker color is green:
(GRN mode)



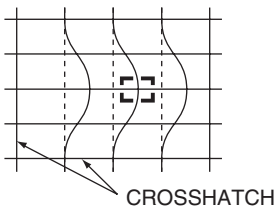
① : Moves the marker clockwise from the center to the outside.
④ : Moves the marker counter clockwise from the outside to the center.

* Fine adjustment can be made on the basis of a marker position using the joystick to move ▲ ▼ ◀ or ▶.

Move joystick ▲ direction



Move joystick ▶ direction



6. Press the “9” button on the remote commander to return to the coarse adjustment mode.

2-13.PJE ADJUSTMENT (SUB DEFLECTION ADJUSTMENT)

Adjustment item	Adjustment type		
	G	R	B
	H/V*	H/V*	H/V*
CENT	O/O	O/O	O/O
SKEW	O/O	O/O	O/O
SIZE	O/O	O/O	O/O
LIN	O/O	O/O	O/O
BOW	O/O	O/O	O/O
KEY	O/O	O/O	O/O
PIN	O/O	O/O	O/O
MLIN	O/—	O/—	O/—
MSIZ	O/—	O/—	O/—

* H = Horizontal V = Vertical O = Yes — = No

Note: If the value is over the limit value, adjust these in the fine adjustment.

Coarse Data Limit Value:

CENT H	-135 TO + 205
CENT V	-150 TO + 190
SKEW	-75 TO + 75
SIZE H	-75 MAX
BLUE H LIN	-425 MIN
RED H LIN	+425 MAX
FINE DATA LIMIT Except the extreme left & right outside columns which have no limit	± 107

2-13-1. ADJUSTMENT FOR NTSC FULL MODE

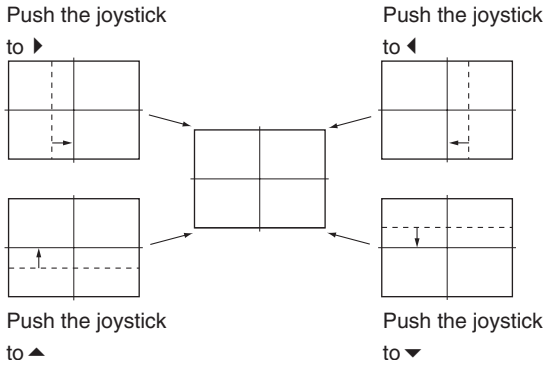
- The adjustment should be done in the numerical order given.

1) GREEN ADJUSTMENT

1. Cover the red and blue CRT lenses with lens caps to allow only green to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Enter the monoscope signal to set.
3. Select the PJE mode.
4. Press the “6” button on the remote commander to display the internal test signal (crosshatch).
5. Select “GRN CENT”, and adjust so that the pictures coincide in the center of screen.

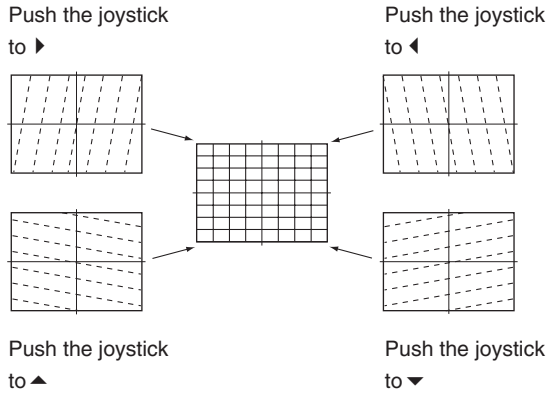
Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

GRN CENT (Horizontally/Vertically)



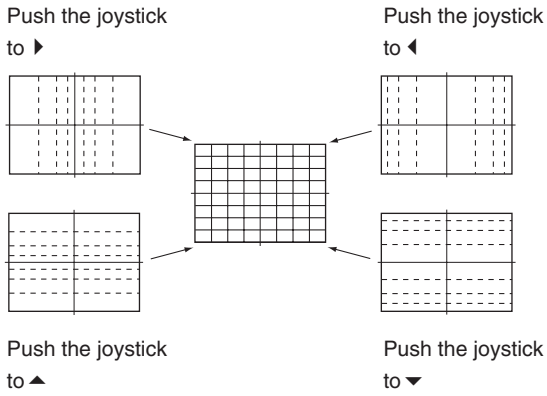
6. Select “GRN SKEW”, and correct the tilt of horizontal lines and vertical lines.

GRN SKEW (Horizontally/Vertically)



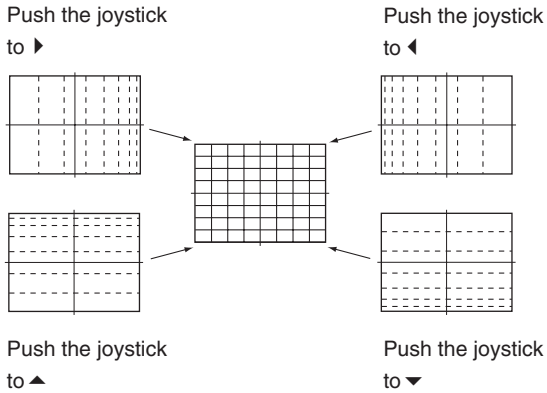
7. Select “GRN SIZE”, and adjust so that each distance from center to left end and to right end is equal. Adjust so that each distance from center to top and to bottom is equal.

GRN SIZE (Horizontally/Vertically)



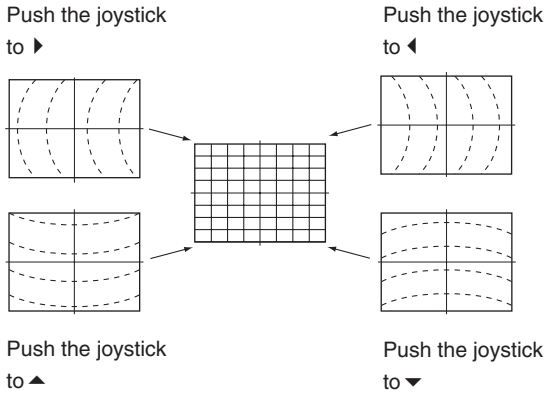
8. Select “GRN LIN”, and adjust so that each space at the right end and at the left end of screen is equal. Adjust so that each space at the top and at the bottom of screen is equal.

GRN LIN (Horizontally/Vertically)



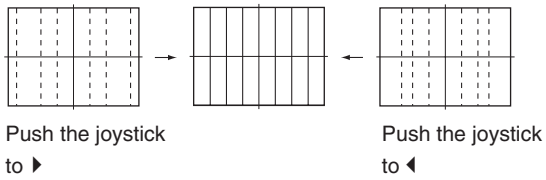
9. Select “GRN BOW”, and adjust so that the raster is not curved.

GRN BOW (Horizontally/Vertically)



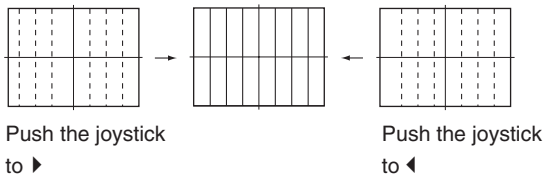
10. Select “GRN MSIZ”, and correct the space intervals for the horizontal section so the screen is equal.

GRN MSIZ (Horizontally)



11. Select “GRN MLIN”, and correct the sizes of the horizontal line so the center of the screen is symmetrical left and right.

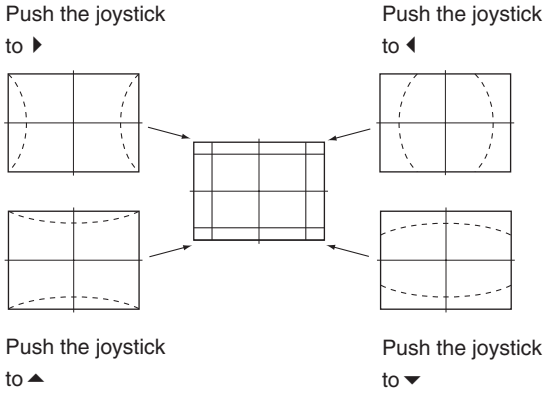
GRN MLIN (Horizontally)



Note: The SIZE and LIN, MSIZ and MLIN adjustments affect each other. If necessary, adjust these mutually.

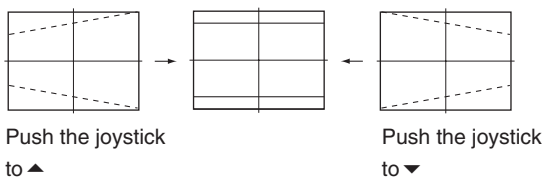
12. Select “GRN PIN”, and adjust so that right and left vertical lines on the screen become straight. Adjust so that upper and lower horizontal lines on the screen become straight.

GRN PIN (Horizontally/Vertically)



13. Select “GRN KEY”, and adjust so that upper and lower horizontal lines on the screen become parallel.

GRN KEY (Vertically)



Note: The VPIN and KEY adjustments affect each other. If necessary, adjust these mutually.

14. Press the “9” button on the remote commander to enter fine adjustment mode.
15. Make the fine adjustment so that horizontal lines and vertical lines become straight.
16. Press the “9” button on the remote commander to return to coarse adjustment mode.

2) RED ADJUSTMENT

1. Cover the blue CRT lens with a lens caps to allow only the green and red to show (or use the method shown in the note below for turning off the CRTs individually without using lens caps).
2. Press the “3” button on the remote commander to select RED mode.
3. Adjust the following items so that red lines overlap with green lines.
   - RED CENT (horizontally/vertically)
   - RED SKEW (horizontally/vertically)
   - RED SIZE (horizontally/vertically)
   - RED LIN (horizontally/vertically)
   - RED MSIZ (horizontally)
   - RED MLIN (horizontally)
   - RED PIN (horizontally/vertically)
   - RED KEY (vertically)
4. Press the “9” button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green lines.
6. Press the “9” button on the remote commander to return to coarse adjustment mode.

Note: If lens caps are unavailable, you can cut off the unnecessary color beams by controlling the service mode MCP-RON, GON, BON.

3) BLUE ADJUSTMENT

1. Remove the lens cap from the blue picture lens to display all colors.
2. Press the “3” button on the remote commander to select BLU mode.
3. Adjust the following items so that blue lines overlap with green lines.
   - BLU CENT (horizontally/vertically)
   - BLU SKEW (horizontally/vertically)
   - BLU SIZE (horizontally/vertically)
   - BLU LIN (horizontally/vertically)
   - BLU PIN (horizontally/vertically)
   - BLU KEY (vertically)
4. Press the “9” button on the remote commander to enter fine adjustment mode.
5. Make the fine adjustment so that horizontal lines and vertical lines overlap with green and red lines.
6. Press the “9” button on the remote commander to return `to coarse adjustment mode.

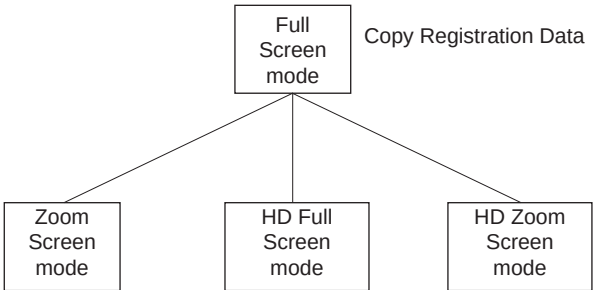
Note: When replacing CRTs, adjust the set-up adjustments (2-1 to 2-9) and the registration adjustment (2-12). When replacing multiple CRTs at the same time, replace and adjust them individually.

4) REGISTRATION DATA WRITING

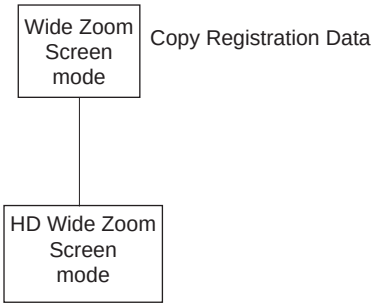
1. After completing each adjustment of green, blue, and red for the NTSC Full mode press the “MUTING”+ “ENTER” buttons in PJE service mode on the remote commander to write the registration data to the NVM.

2-13-2. COPYING ALL REGISTRATION DATA TO OTHER MODES

1. Make sure that the adjustment for NTSC Full mode is complete and the data has already been written.
2. Select the PJE mode.
3. Select Copy and set the data to “01”, and press the “MUTING”+“ENTER” buttons on the remote commander.
4. The data from the NTSC Full mode is copied to NTSC Zoom Screen, HD Full Screen, and HD Zoom Screen modes.



5. Make sure that the adjustment for NTSC Wide Zoom mode is complete and the data has already been written.
6. Select the PJE mode.
7. Select Copy and set the data to “01”, and press the “MUTING”+“ENTER” buttons on the remote commander.
8. The data from the NTSC Wide Zoom mode is copied to HD Wide Zoom Screen mode.



9. Check in the other modes and adjust as demands.
   Be sure to write data in each mode.

2-14.AUTO REGISTRATION OFFSETS

IMPORTANT
This adjustment must be performed after registration adjustment or after readjustment for any reason!

Once registration in all modes is satisfactory:

1. Darken the room environment near the set.
2. Select input of RF (with a signal) or Video1 - Video4 (with a signal), and enter Full Mode.
   WARNING: DO NOT USE 1080i SIGNAL!
3. Enter service mode and select the PJE group.
4. Press the “MUTING” + “ENTER” buttons on the remote commander to write the data for Full mode.

Important:

You must complete step 4 even if registration looks OK in Full mode and there were not any adjustments made.

5. To automatically store the offset values, press the “FLASH FOCUS” button on the front panel of the set.
   (The offset value is now stored)
   If FLASH FOCUS successfully calibrates, it displays “CALIBRATION OK.”
   If FLASH FOCUS does not successfully calibrate, an error message is displayed. (Refer to section 2-15)
6. Exit the service mode.
7. If the calibration was successful, press the “FLASH FOCUS” button out of service mode.
8. Confirm registration is OK in all modes.

2-15.AUTO REGISTRATION ERROR CODES

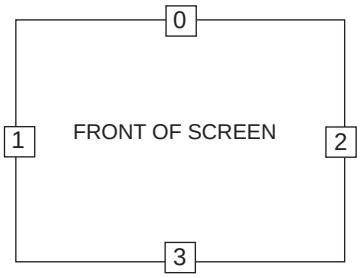
If an error code is displayed after the set has been correctly adjusted, check the following items: position, tilt and sizing. If any of these adjustments are off, even slightly, the auto-registration pattern will not hit the four sensors properly. This occurs when the internal generator patterns are being flashed on the screen for the sensors to read. Therefore, auto registration (called auto convergence) cannot operate properly, causing an error code to be displayed. In order for this function to operate properly, position, tilt and size must be adjusted properly.

ERROR CODE LIST

ERROR CODE	DESCRIPTION	NOTE
00	No Error	
10	Sensor 0 low output	Check sensor 0, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 130 VUP, 134 HMID if necessary.
11	Sensor 1 low output	Check sensor 1, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 133 HLE, 131 VMID if necessary.
12	Sensor 2 low output	Check sensor 2, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 135 HRIV, 131 VMID if necessary.
13	Sensor 3 low output	Check sensor 3, connection/wiring, circuit, and pattern position (are patterns hitting sensor?) adjust 132 VLOW, 134 HMID if necessary.
20	Sensor 0 high output	Check sensor 0 and circuit.
21	Sensor 1 high output	Check sensor 1 and circuit.
22	Sensor 2 high output	Check sensor 2 and circuit.
23	Sensor 3 high output	Check sensor 3 and circuit.
30	V CENT or SKEW adjustment loop overflow	Check 131 VMID data and check registration condition.
31	H CENT or SKEW adjustment loop overflow	Check 134 HMID data and check registration condition.
32	H LIN or SIZE adjustment loop overflow	Check 133 HLE and 135 HRIT data and check registration condition.
40	V CENT regi data overflow	Check 131 VMID data and confirm V CENT data (all modes) is not near 511.
41	H CENT regi data overflow	Check 134 HMID data and confirm H CENT data (all modes) is not near 511.
42	V SKEW regi data overflow	Check 131 VMID data and confirm V SKEW data (all modes) is not near 511.
43	H SKEW regi data overflow	Check 134 HMID data and confirm H SKEW data (all modes) is not near 511.
44	H LIN regi data overflow	Check 133 HLE and 135 HRIT data and confirm H CENT data (all modes) is not near 511.
45	H SIZE regi data overflow	Check 133 HLE and 135 HRIT data and confirm H CENT data (all modes) is not near 511.
50	V CENT regi data overdrow	Check 131 VMID data and confirm V CENT data (all modes) is not near -512.
51	H CENT regi data overdrow	Check 134 HMID data and confirm H CENT data (all modes) is not near -512.
52	V SKEW regi data overdrow	Check 131 VMID data and confirm V SKEW data (all modes) is not near -512.
53	H SKEW regi data overdrow	Check 134 HMID data and confirm H SKEW data (all modes) is not near -512.
54	H LIN regi data overdrow	Check 133 HLE and 135 HRIT data and confirm H CENT data (all modes) is not near -512.
55	H SIZE regi data overdrow	Check 133 HLE and 135 HRIT data and confirm V CENT data (all modes) is not near -512.
60	CENT/SKEW calibration loop overflow	Check 134 HMID and 131 VMID data and check registration condition.
61	SIZE/LIN calibration loop overflow	Check 133 HLE, 135 HRIT, 130 VUP, and 132 VLOW data and check registration condition.
70	V CENT/SKEW ratio limit	Check sensors 1 and 2, connection/wiring, circuit, increase 129 RTML.
71	H CENT/SKEW ratio limit	Check sensors 0 and 3, connection/wiring, circuit, increase 129 RTML.
73	H SIZE/Lin ratio limit	Check sensors 1 and 2, connection/wiring, circuit, increase 129 RTML.
80	SIZE Limit Error	Check that horizontal SIZE data is not near 128 SZLM.

* In the case of multiple errors, last error is displayed.

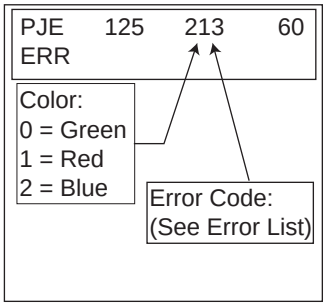
SENSOR POSITIONS



0: UPPER SENSOR
1: LEFT SENSOR
2: RIGHT SENSOR
3: LOWER SENSOR

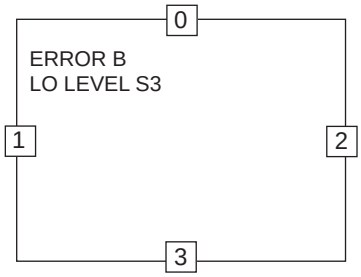
• ERROR CODE SCREEN DISPLAY

Error codes in normal (customer) mode are not displayed. You must enter PJE service mode to see the error code.



(Blue Sensor 3 Low Output)

In service mode, the error will be displayed in text format.



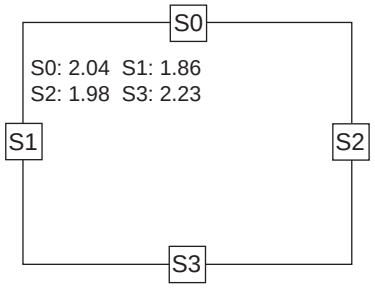
2-16.AUTO REGISTRATION DIAGNOSTICS

The TEST service item (PJE #136) can be used to determine if a sensor or sensor amplifier is working properly. It can also be used to check pattern positions.

133

Color: 0=Green, 1=Red, 2=Blue, 3=All
CS/ZL: 0=None, 1=Cent/Skew, 2=siZe/Lin, 3=Both
Display/Loop: 0=Display, 1:Loop

DISPLAY/ LOOP	CS/ZL	COLOR	ACTION
(0)	0	0	Normal calibration (no diagnostics).
(0)	X	X	Performs one adjustment cycle, then displays average peak voltages for the specified CS/ZL and Color.
(0)	3	3	Does nothing (can't display more than one CS/ZL or Color at a time.)
1	X	X	Adjusts specified CS/ZL and Color until a key is pressed. Useful for measuring signals with oscilloscope.



Sensor 0 peak voltage = 2.04 V, etc.

SECTION 3: SAFETY-RELATED ADJUSTMENTS

D BOARD

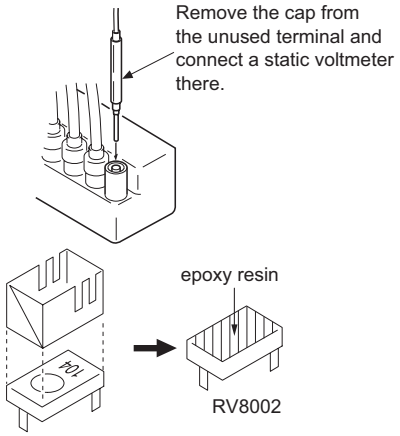
3-1. HV REGULATION CIRCUIT CHECK AND ADJUSTMENT

When replacing the following components marked with a ◪ on the schematic diagram always check the HV regulation, and if necessary re-adjust.

Part Replaced (◪)	Adjustment (⋈)
D BOARD T8001 (RHT), IC8002, IC8004, IC8005, PH8003, R8014, R8015, R8017, R8060, R8012	**HV REGULATOR** RV8002

HV REGULATION ADJUSTMENT

1. Receive the all white signal.
2. Set PIC MAX/BRT CENT.
3. Connect a HV static voltmeter to the unconnected plug of the high-voltage block.
4. Power on the set.
5. Receive the all white signal.
6. Set PIC MAX/BRT CENT.
7. Confirm that the static voltmeter reading is 31.0 ± 0.3kV.
8. If not, adjust with RV8002 to the specified value.
9. After adjustment, put the VR cover on RV8002 (as shown below) and apply sufficient amount of epoxy resin around RV8002 .



3-2. HV HOLD DOWN CIRCUIT OPERATION CHECK

When replacing the following components marked with a ◪ on the schematic diagram always check the hold-down operation.

Part Replaced (◪)	Adjustment (⋈)
D BOARD T8001 (RHT), D8022, IC8001, IC8014, R8008, R8016, R8046, R8052, R8072, R8078, R8079, R8165, R8019	**HV HOLD DOWN** RV8002

OPERATION CHECK

1. Receive any source.
2. Using an external DC supply, apply 5 VDC to pin 3 of CN5 on A Board. Set will shutdown.

G BOARD

3-3. +B MAX VOLTAGE CONFIRMATION

The following adjustments should always be performed when replacing IC6503 R6590.

1. Supply 130VAC to variable autotransformer.
2. Receive dot signal pattern and set the PICTURE and BRIGHTNESS settings to their minimum.
3. Confirm the voltage of TP +B 135V is less than 137.0Vdc.
4. If step 3 is not satisfied, replace IC6503 and repeat steps 1-3.

3-4. +B OVP CONFIRMATION

1. Turn on set.
2. Set input conditions.
3. Turn off set.
4. Separate R6809 (D Board) from +135.
5. Apply external 160 ± 1V DC to open end of R6809.
6. Turn on set.
7. Measure voltage at Pin 8 of CN5006 (D Board). Voltage should be less than 0.8V.

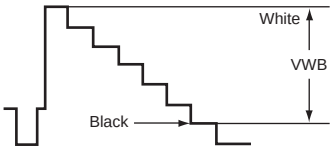
Input Conditions

Input Voltage:	120VAC
Input Signal:	Dot pattern NTSC
Video Controls:	PICTURE set to minimum
	BRIGHTNESS set to minimum

SECTION 4: CIRCUIT ADJUSTMENTS

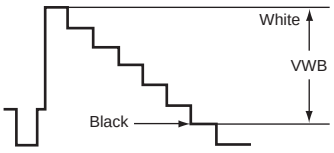
4-1. P & P SUB CONTRAST ADJUSTMENT (VIDEO) (SCON)

1. Receive the signal.
   VIDEO 1 terminal — Composite: Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Minimum
   MCP RON = 0
   BON = 0
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), and set to service mode.
4. Connect an oscilloscope between the check point and ground.
   Check points : A Board CN5 pin 6 (G)
5. Select “CCPM-YLEV” (Main scon), and adjust so that the waveform level of VWB is 1.75 ± 0.03Vp-p.
6. Select “YCTS-SCON” (Sub scon), and adjust so that the waveform level of VWB is 1.75 ± 0.03Vp-p.
7. After completing the adjustments, write the data into memory by pressing “MUTING” → “ENTER” on the remote commander.



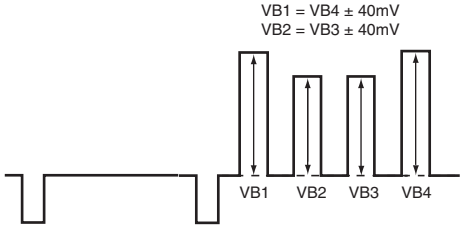
4-2. P & P SUB CONTRAST ADJUSTMENT (RF) (SCON)

1. Receive the signal.
   TV terminal — RF : Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Minimum
   MCP RON = 0
   BON = 0
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), and set to service mode.
4. Connect an oscilloscope between the check point and ground.
   Check points : A Board CN5 pin 6 (G)
5. Select “CCPM-YLEV” (Main scon), and adjust so that the waveform level of VWB is 1.75 ± 0.03Vp-p.
6. Select “YCTS-SCON” (Sub scon), and adjust so that the waveform level of VWB is 1.75 ± 0.03Vp-p.
7. After completing the adjustments, write the data into memory by pressing “MUTING” → “ENTER” on the remote commander.



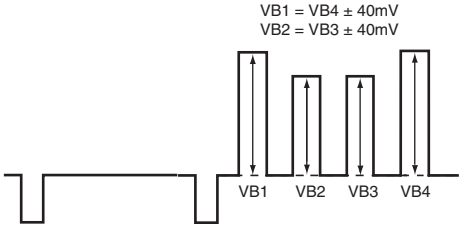
4-3. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT VIDEO (SHUE, SCOL)

1. Receive the signal.
   VIDEO 1 terminal — Composite: Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Center
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), set to service mode.
4. Connect an oscilloscope between pin 7 of CN5 (A Board) connector and ground.
5. Select “CCPM-CLEV, CCPM-SHUE” (Main), and adjust them to have VB1 = VB4 ± 40mV and VB2 = VB3 ± 40mV in the waveform levels.
6. Select “YCTS-SCOL, YCTS-SHUE” (Sub), and adjust them to have VB1 = VB4 ± 40mV and VB2 = VB3 ± 40mVin the waveform levels.
7. After completing the adjustments, write the data into memory by pressing “MUTING” → “ENTER” on the remote commander.



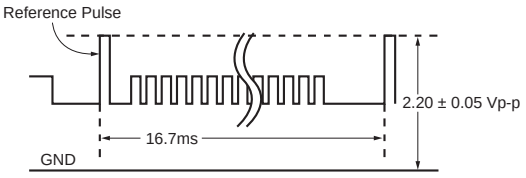
4-4. P & P SUB-HUE AND SUB-COLOR ADJUSTMENT (RF) (SHUE, SCOL)

1. Receive the signal.
   TV terminal : Color-bar (white-75%, 7.5% setup)
2. VIDEO MODE : Pro
   PICTURE : Maximum
   COLOR : Center
3. Set to P & P mode, and receive the color bars in both main and sub (left and right), set to service mode.
4. Connect an oscilloscope between pin 7 of CN5 (A Board) connector and ground.
5. Select “CCPM-CLEV, CCPM-SHUE” (Main), and adjust them to have VB1 = VB4 ± 40mV and VB2 = VB3 ± 40mV in the waveform levels.
6. Select “YCTS-SCOL, YCTS-SHUE” (Sub), and adjust them to have VB1 = VB4 ± 40mV and VB2 = VB3 ± 40mV in the waveform levels.
7. After completing the adjustments, write the data into memory by pressing “MUTING” → “ENTER” on the remote commander.



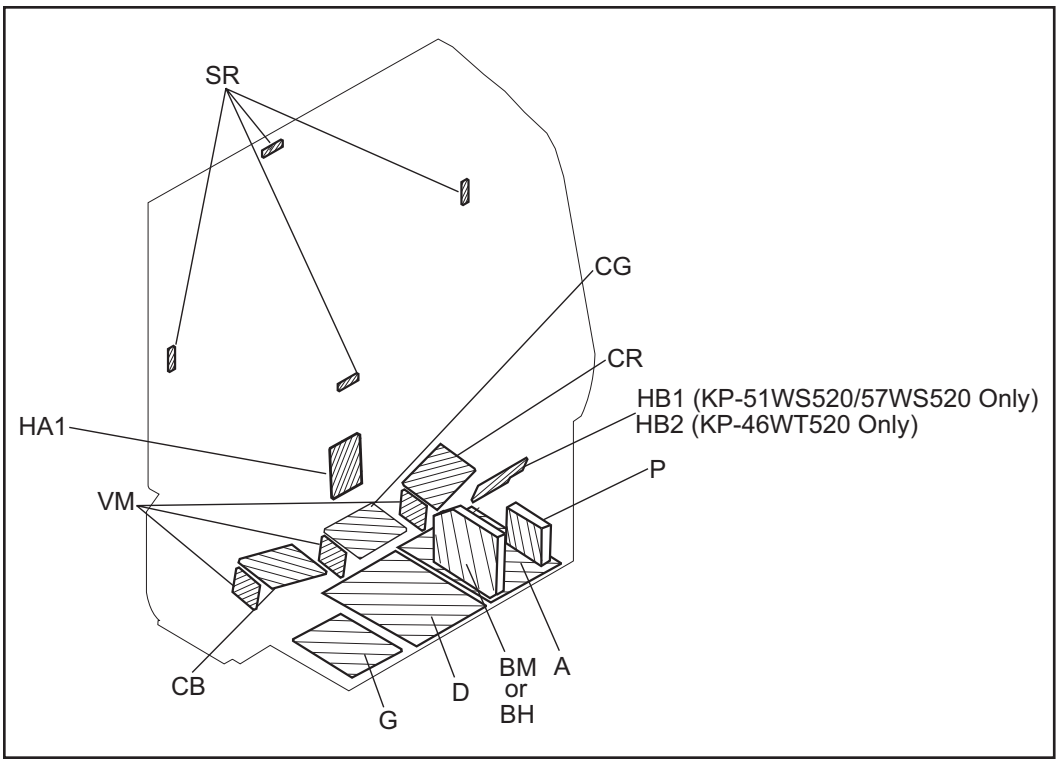
4-5. BLUE OFFSET ADJUSTMENT

1. Receive the all black (1080i, component) signal with VIDEO 5 input, and set PICTURE to maximum.
2. Connect an oscilloscope between CN5 7 pin (B) on the (A Board) and ground.
3. Set in the service mode and select the category “DEF2-SLIN”.
4. Adjust “3 SLIN” so that the waveform level is 2.20 ± 0.05Vpp.
5. After completing the adjustments, write the data into memory by pressing “MUTING” → “ENTER” on the remote commander.
6. Receive the RF signal and change the wide screen mode to “Wide Zoom”. Copy the same data to “DEF2-SLIN”.



SECTION 5: DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in µF unless otherwise noted. pF : µµF 50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms. K=1000, M=1000k

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm
Rating electrical power : $^1/_4$ W

$^1/_4$ W in resistance, $^1/_{10}$ W and $^1/_8$ W in chip resistance.

: nonflammable resistor.

: fusible resistor.

△ : internal component.

: panel designation and adjustment for repair.

⊥ : earth ground

⏚ : earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a NTSC color-bar signal input.

Readings are taken with a 10M digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibillity.

The components identified by shading and ⚠ symbol are critical for safety. Replace only with part number specified.

The symbol indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

Le symbole indique une fusible a action rapide. Doit etre remplace par une fusible de meme yaleur, comme maque.

: B+ line

: B-line. (Actual measured value may be different).

: signal path. (RF)

Circled numbers are waveform references.

The components identified by ⋈ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by ◪, make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by ⋈ and repeat the adjustment until the specified value is achieved.

(Refer to adjustments in Sections 3-1 and 3-2.)

When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced (◪)	Adjustment (⋈)
D BOARD T8001 (RHT), IC8002, IC8004, IC8005, PH8003, R8014, R8015, R8017, R8060, R8012	**HV REGULATOR** RV8002
D BOARD T8001 (RHT), D8022, IC8001, IC8014, R8008, R8016, R8046, R8052, R8072, R8078, R8079, R8165, R8019	**HV HOLD DOWN** RV8002

REFERENCE INFORMATION

RESISTOR	**: RN**	**METAL FILM**
	: RC	**SOLID**
	: FPRD	**NONFLAMMABLE CARBON**
	: FUSE	**NONFLAMMABLE FUSIBLE**
	: RW	**NONFLAMMABLE WIREWOUND**
	: RS	**NONFLAMMABLE METAL OXIDE**
	: RB	**NONFLAMMABLE CEMENT**
	: ※	**ADJUSTMENT RESISTOR**
COIL	**: LF-8L**	**MICRO INDUCTOR**
CAPACITOR	**: TA**	**TANTALUM**
	: PS	**STYROL**
	: PP	**POLYPROPYLENE**
	: PT	**MYLAR**
	: MPS	**METALIZED POLYESTER**
	: MPP	**METALIZED POLYPROPYLENE**
	: ALB	**BIPOLAR**
	: ALT	**HIGH TEMPERATURE**
	: ALR	**HIGH RIPPLE**

Terminal name of semiconductors in silk screen printed circuit (*)

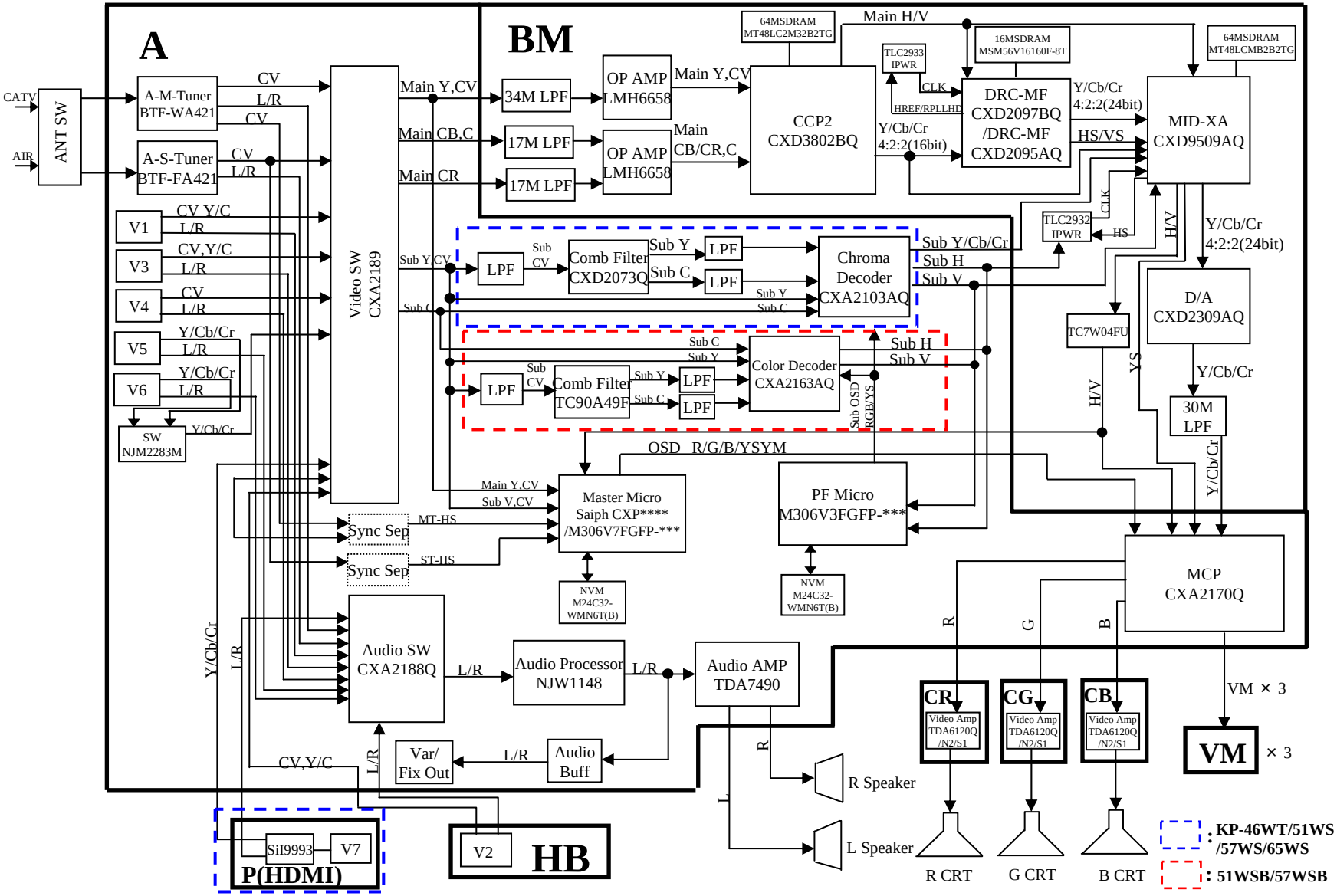
	Device	Printed symbol	Terminal name	Circuit
①	Transistor		Collector Base Emitter	
②	Transistor		Collector Base Emitter	
③	Diode		Cathode Anode	
④	Diode		Cathode Anode (NC)	
⑤	Diode		Cathode Anode (NC)	
⑥	Diode		Common Anode Cathode	
⑦	Diode		Common Anode Cathode	
⑧	Diode		Common Anode Anode	
⑨	Diode		Common Anode Anode	
⑩	Diode		Common Cathode Cathode	
⑪	Diode		Common Cathode Cathode	
⑫	Diode		Anode Cathode Anode Anode Cathode Anode	
⑬	Transistor (FET)		Drain Source Gate	
⑭	Transistor (FET)		Drain Source Gate	
⑮	Transistor (FET)		□ Source □ Drain □ Gate	
⑯	Transistor		□ Emitter □ Collector □ Base	
⑰	Transistor		C2 B1 E1 E2 B2 C1	
⑱	Transistor		C1 B2 E2 E1 B1 C2	
⑲	Transistor		C1 B2 E2 E1 B1 C2	
⑳	Transistor		C1 B2 E2 E1 B1 C2	
㉑	Transistor		E2 B1 E1 C2 C1(B2)	
㉒	Transistor		(B2) B1 E1 E2 C1 C2	
㉓	Transistor		(B2) E2 E1 B1 C2 C1	
-	Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

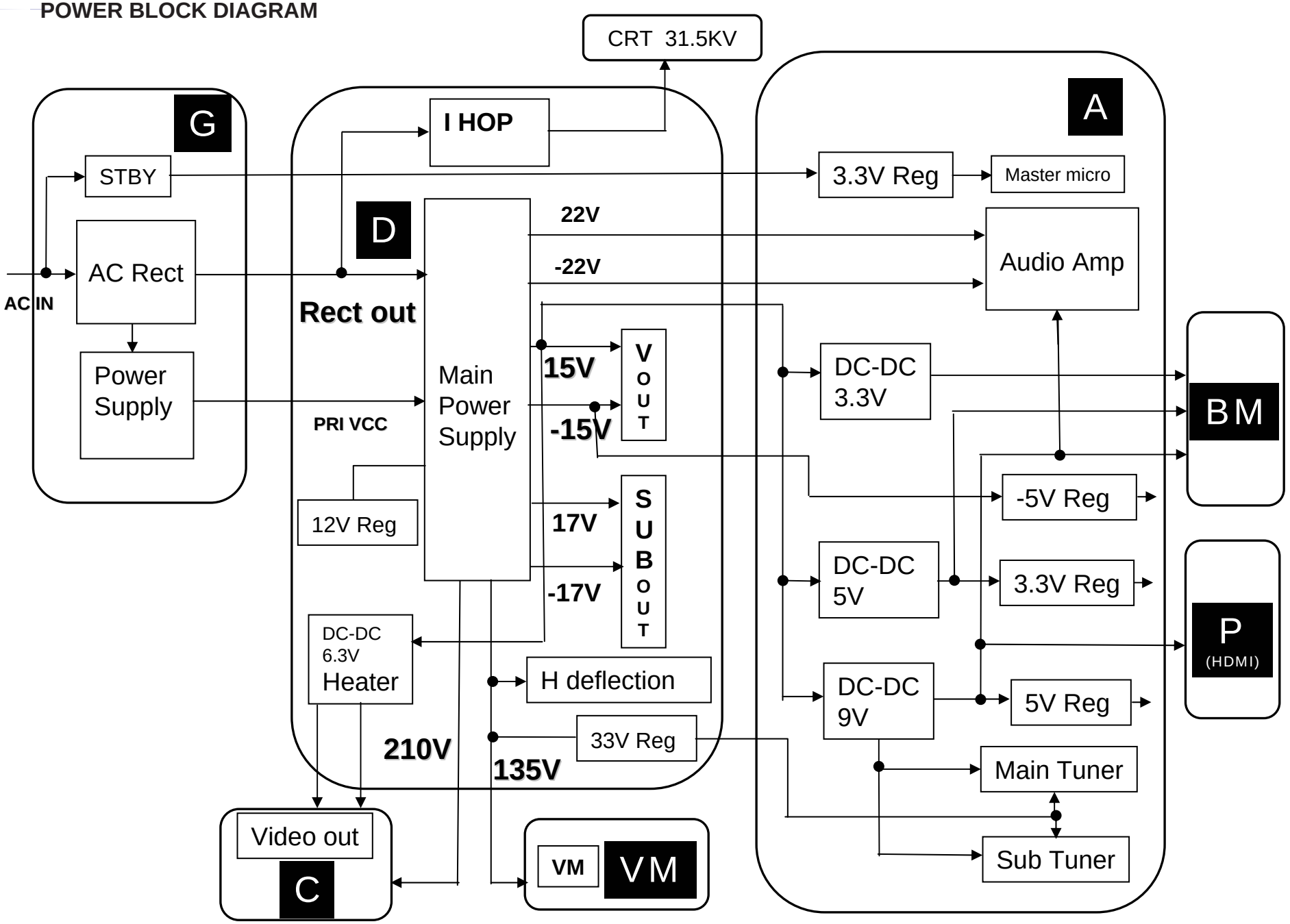
Ver.1.6

5-3. BLOCK DIAGRAMS

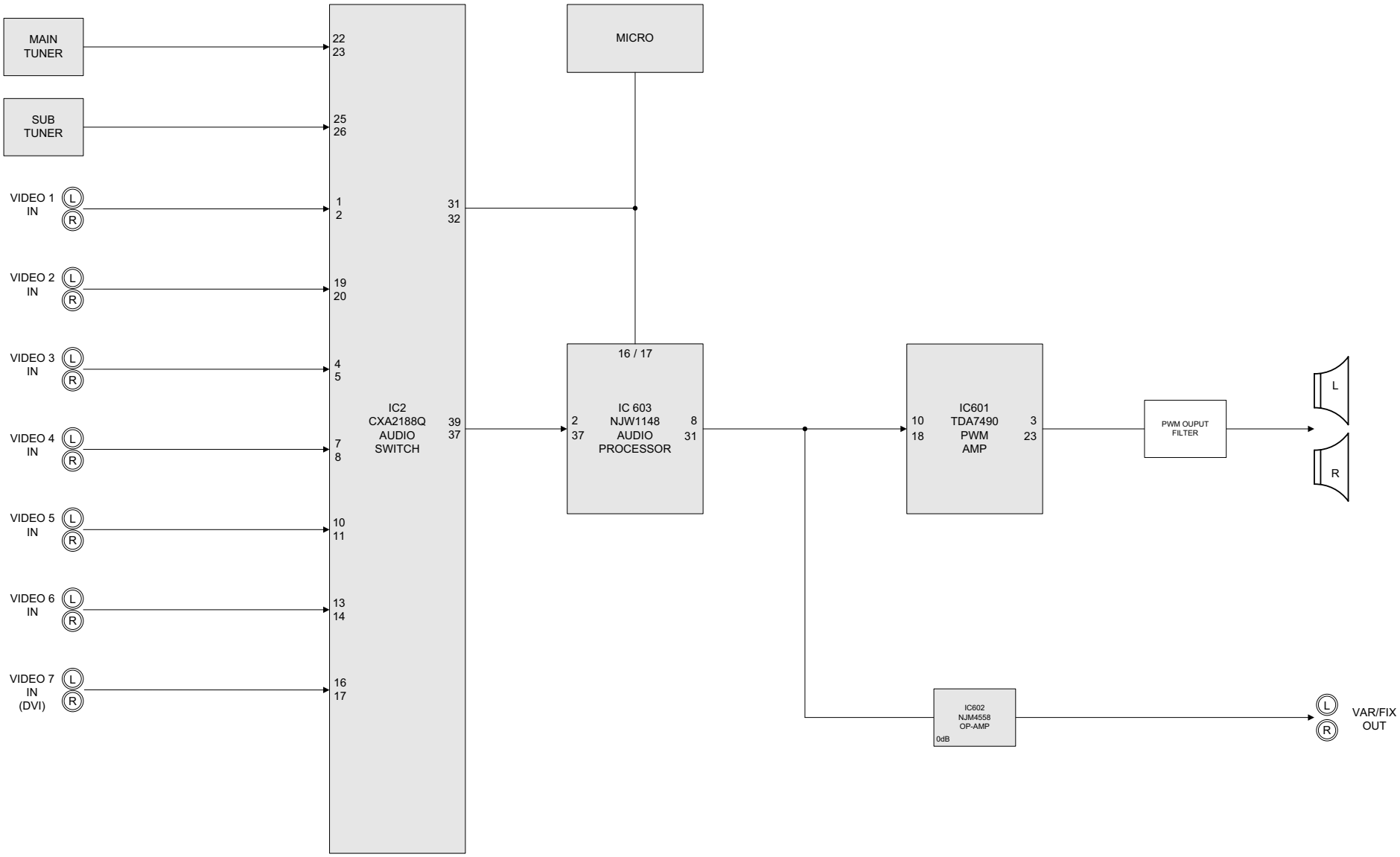
SIGNAL FLOW BLOCK DIAGRAM



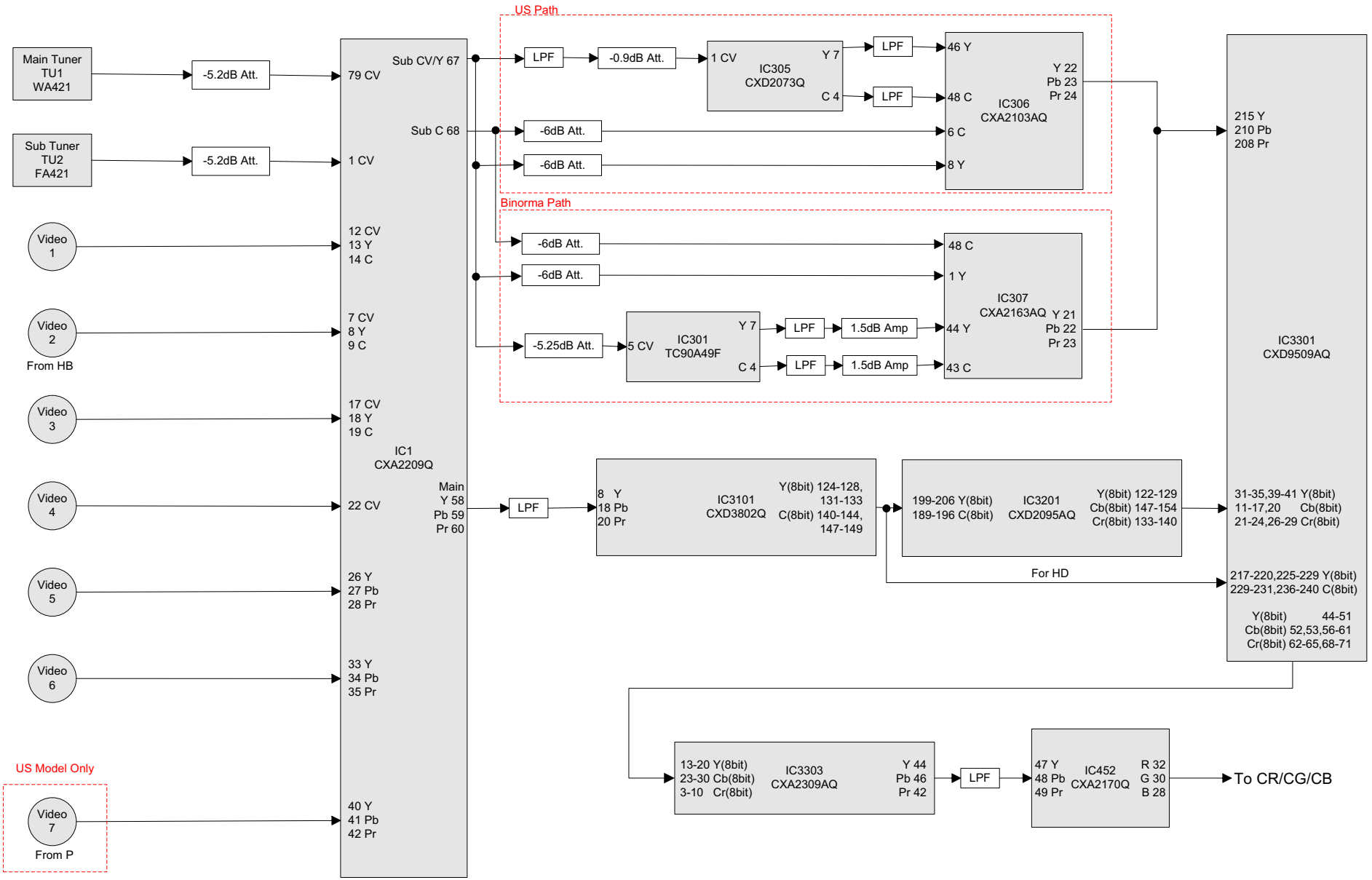
POWER BLOCK DIAGRAM



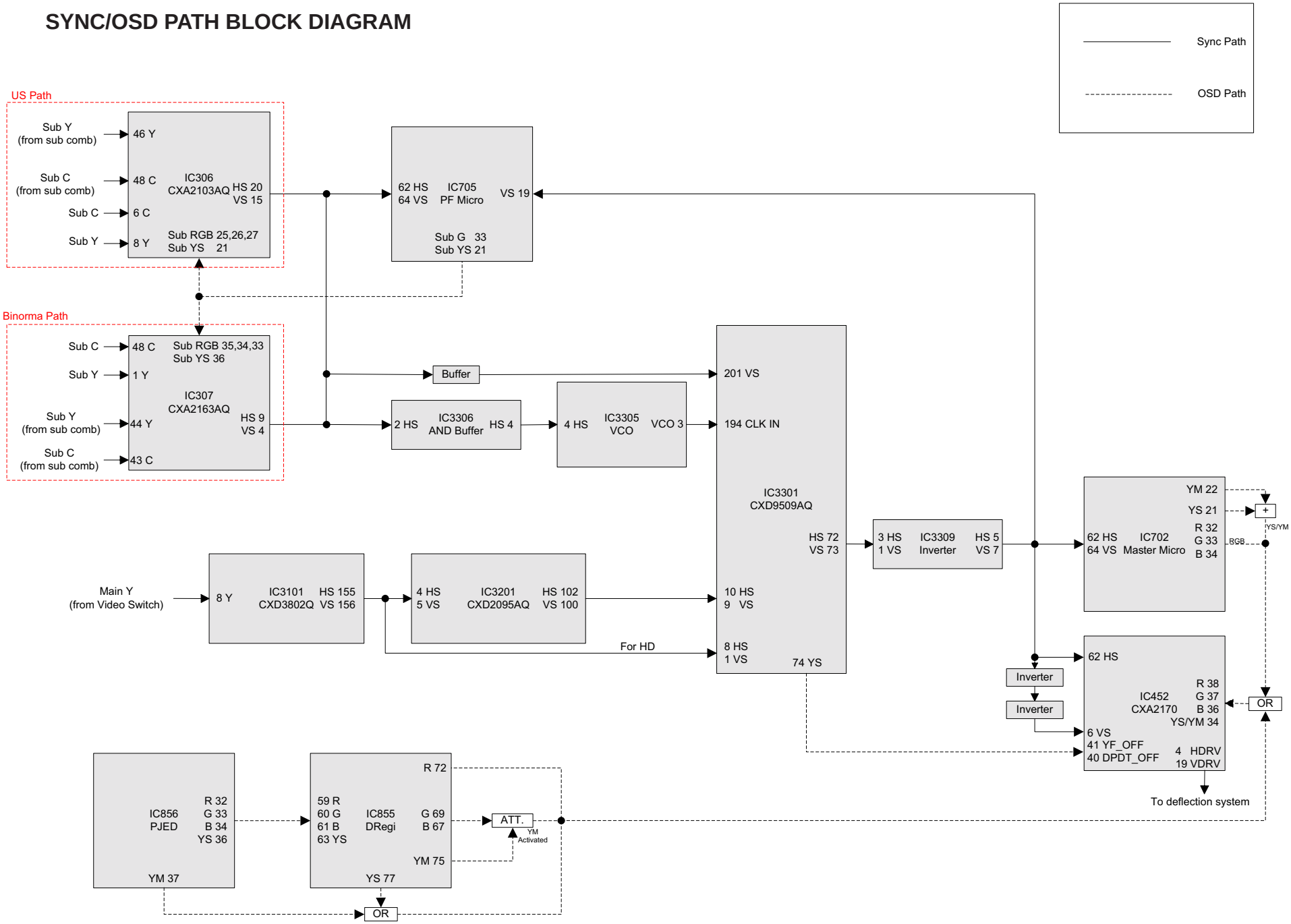
AUDIO SIGNAL PATH BLOCK DIAGRAM



VIDEO PATH BLOCK DIAGRAM

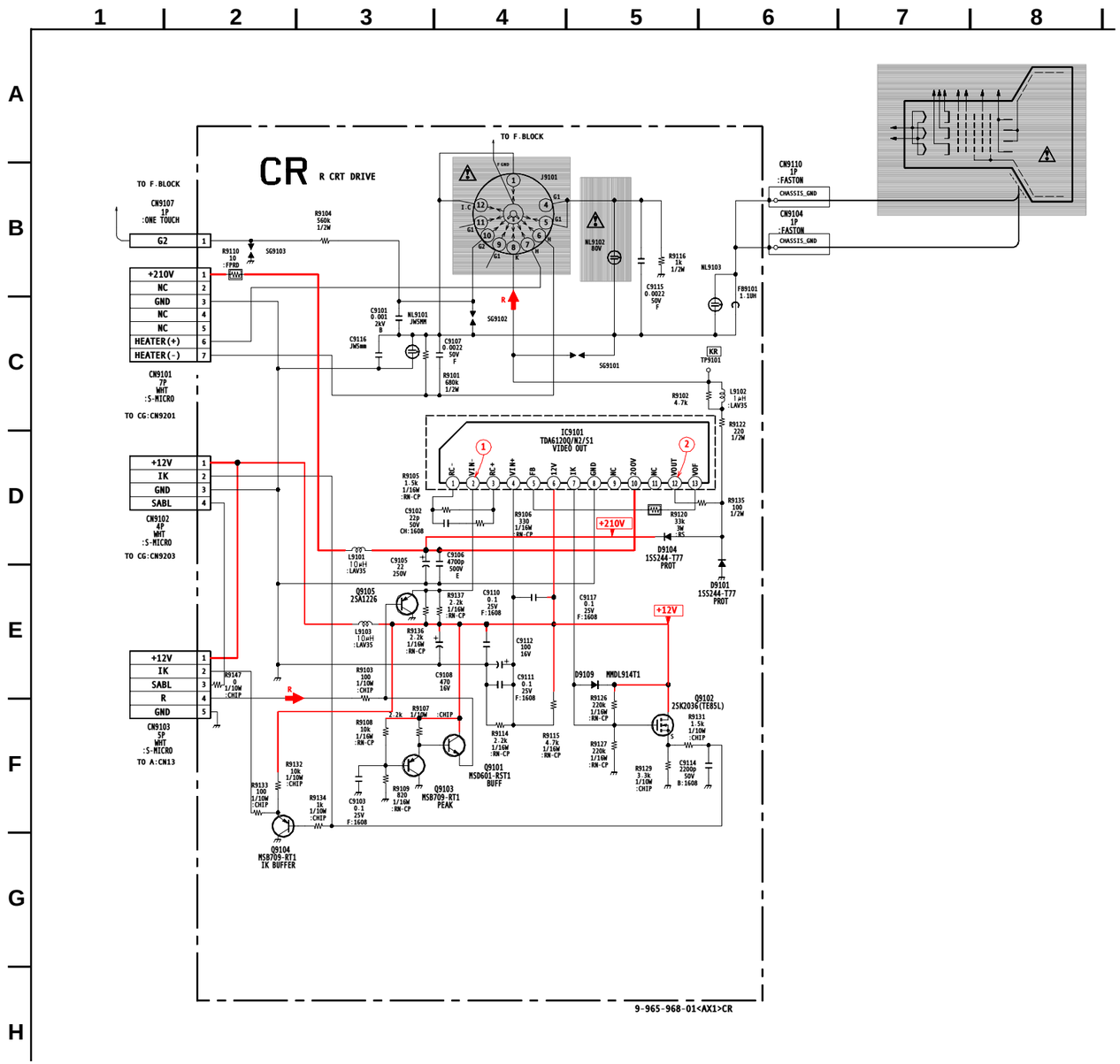


SYNC/OSD PATH BLOCK DIAGRAM

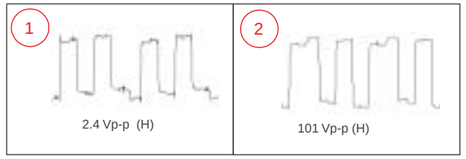


5-4. SCHEMATICS AND SUPPORTING INFORMATION

CR BOARD SCHEMATIC DIAGRAM



CR BOARD WAVEFORMS



CR BOARD IC VOLTAGE LIST

IC9101			
PIN	VOLT	PIN	VOLT
1	2.0	8	GND
2	2.7	9	N/C
3	3.4	10	200.0
4	4.1	11	N/C
5	2.6	12	157.7
6	12.0	13	158.2
7	7.0	All voltages are in V.	

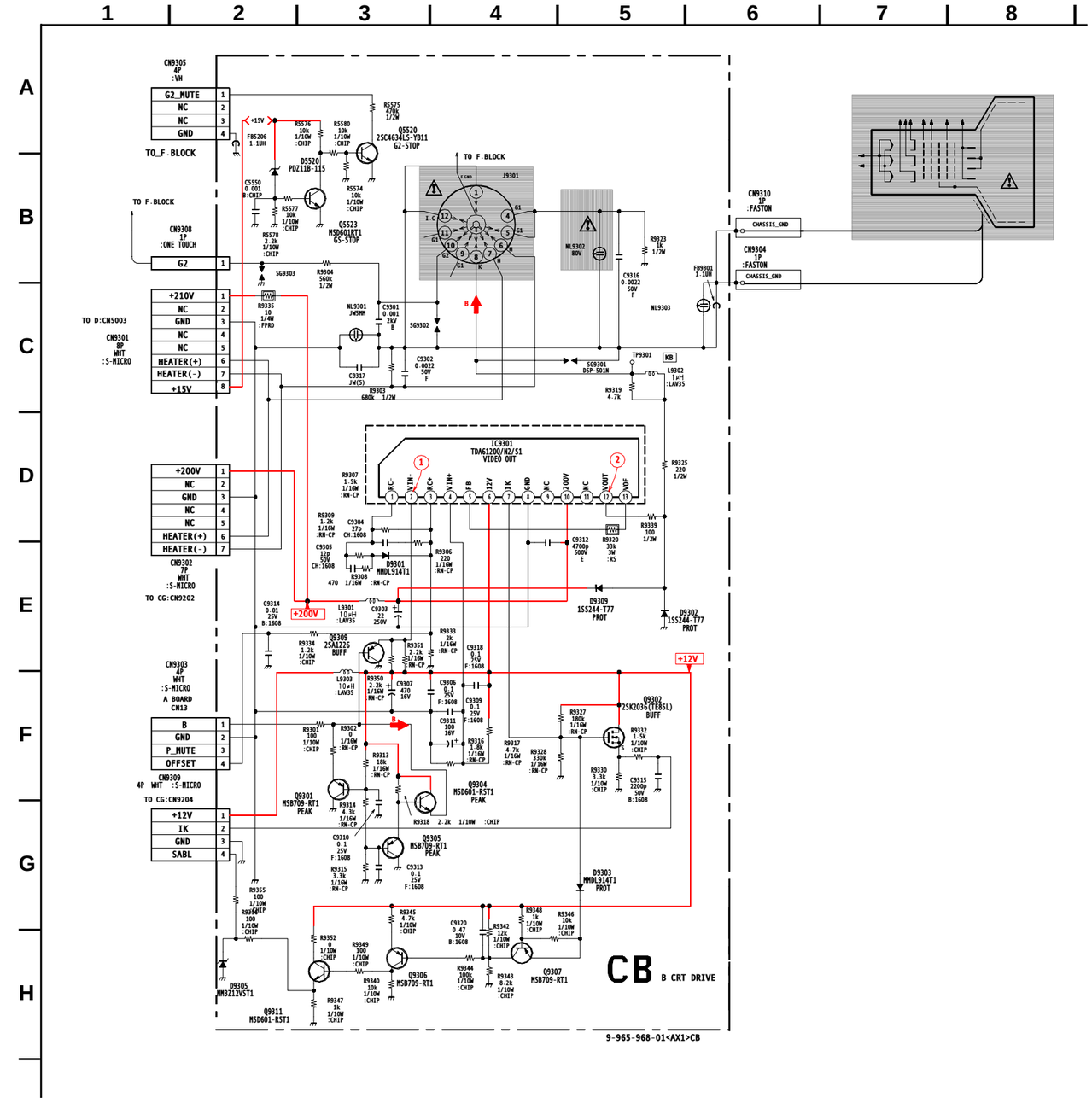
CR BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9101	2.3	12.0	6.3
Q9103	1.7	GND	2.3
Q9104	8.4	GND	8.5
Q9105	2.3	GND	2.9

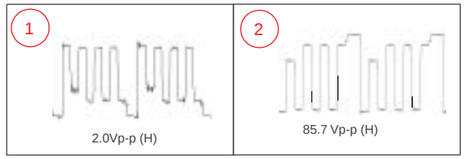
	G	D	S
Q9102	7.0	12.0	5.7

All voltages are in V.

CB BOARD SCHEMATIC DIAGRAM



CB BOARD WAVEFORMS



CB BOARD IC VOLTAGE LIST

IC9301			
PIN	VOLT	PIN	VOLT
1	2.1	8	GND
2	2.9	9	N/C
3	1.6	10	200.0
4	2.9	11	N/C
5	2.5	12	161.8
6	12.0	13	144.5
7	7.3		

All voltages are in V.

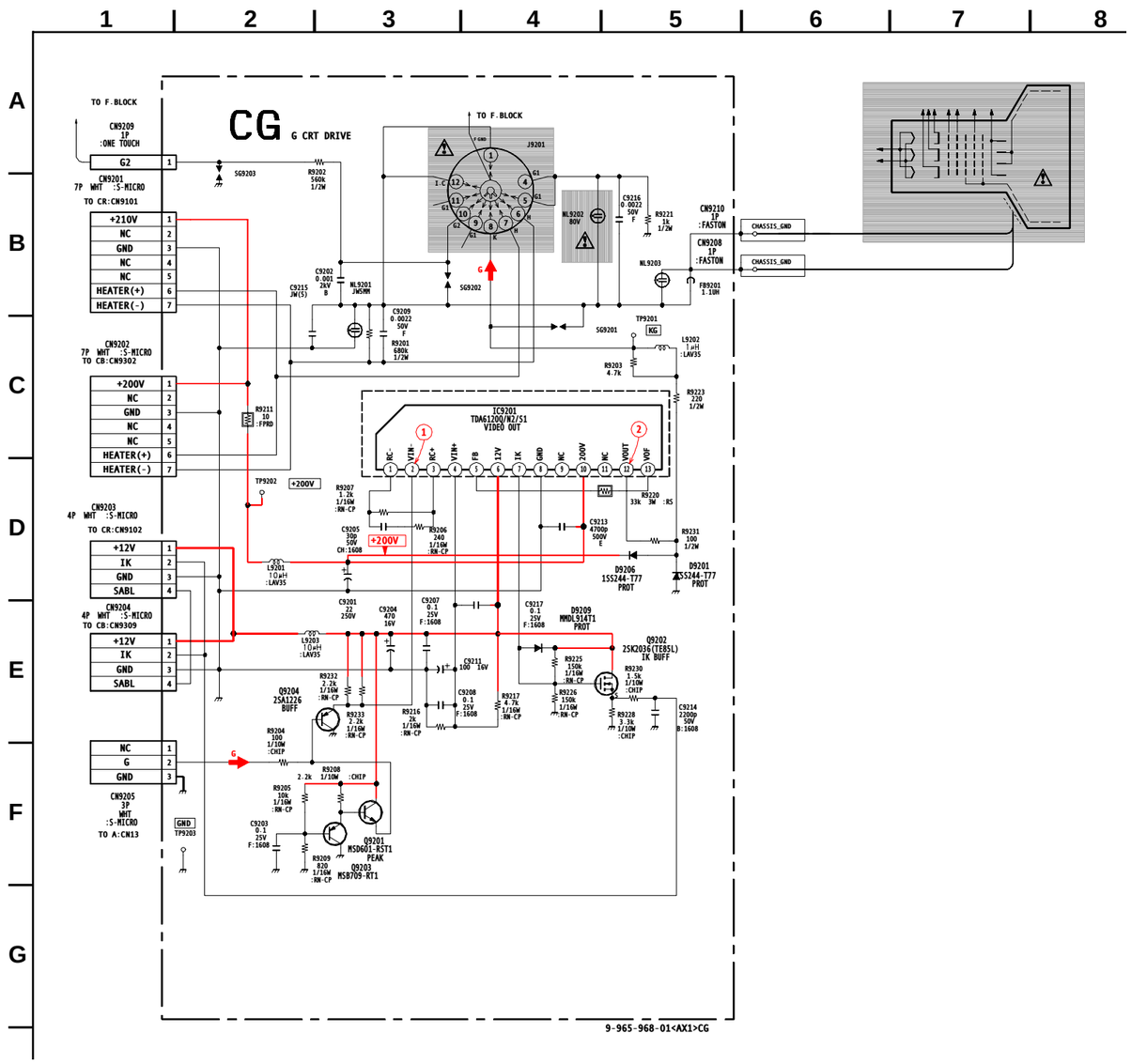
CB BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q5520	0.0	566.0	GND
Q5523	0.0	1.9	GND
Q9301	1.7	GND	2.3
Q9304	2.3	12.0	6.3
Q9305	1.7	GND	2.3
Q9306	7.3	7.7	7.8
Q9307	7.7	11.7	7.0
Q9309	2.3	GND	2.9
Q9311	0.0	12.1	7.6

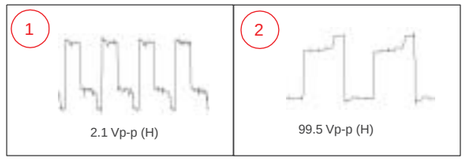
	G	D	S
Q9302	7.3	12.0	6.0

All voltages are in V.

CG BOARD SCHEMATIC DIAGRAM



CG BOARD WAVEFORMS



CG BOARD IC VOLTAGE LIST

IC9201			
PIN	VOLT	PIN	VOLT
1	1.9	8	GND
2	2.6	9	N/C
3	3.1	10	200.0
4	3.8	11	N/C
5	2.5	12	155.1
6	12.0	13	159.2
7	7.6		

All voltages are in V.

CG BOARD TRANSISTOR VOLTAGE LIST

	B	C	E
Q9201	2.3	12.0	6.3
Q9203	1.7	GND	2.3
Q9204	2.3	GND	2.9

	G	D	S
Q9202	7.6	12.0	6.3

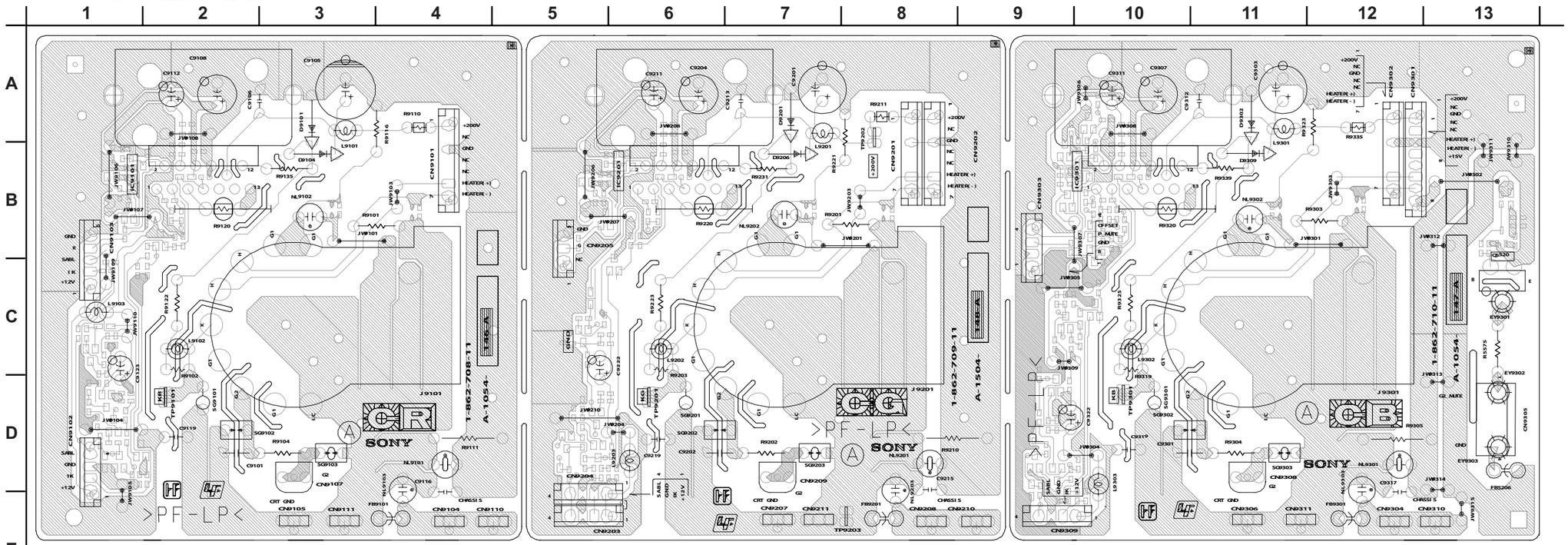
All voltages are in V.

CR [R CRT DRIVE]

CB [B CRT DRIVE]

CG [G CRT DRIVE]

COMPONENT SIDE

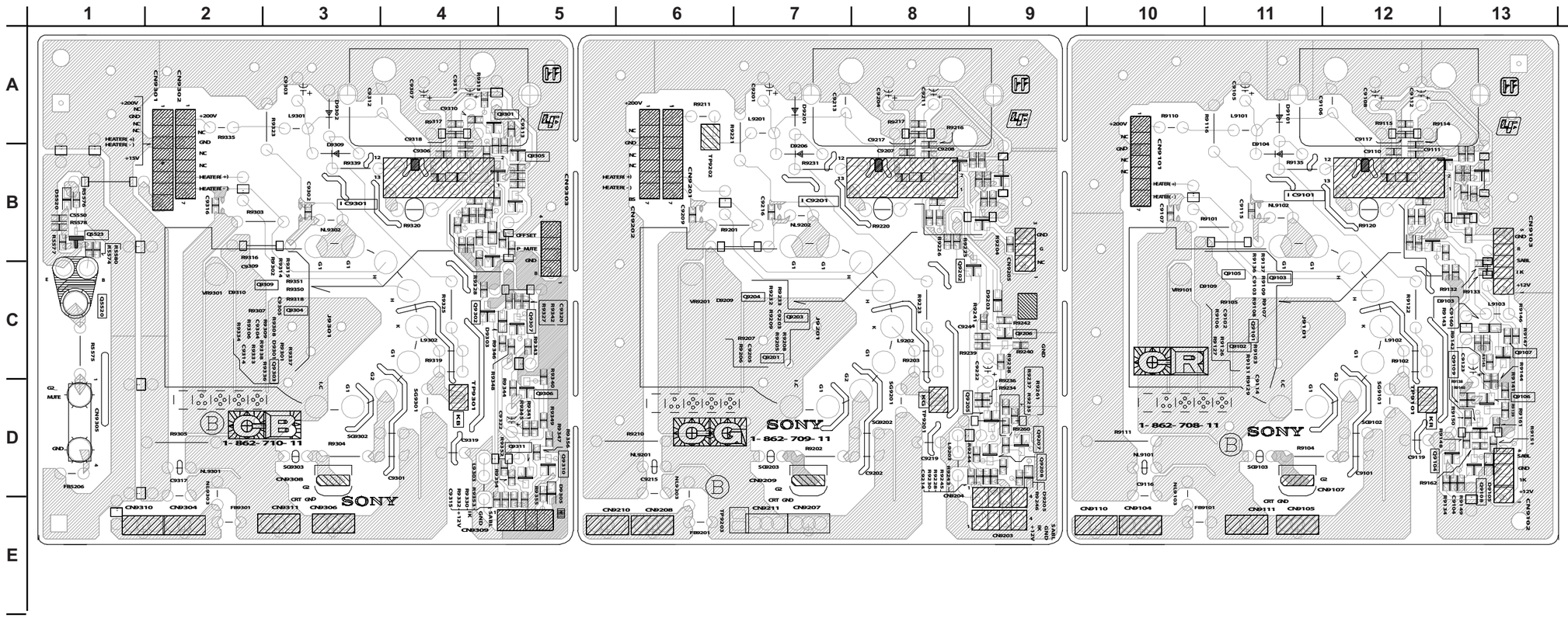


CR [R CRT DRIVE]

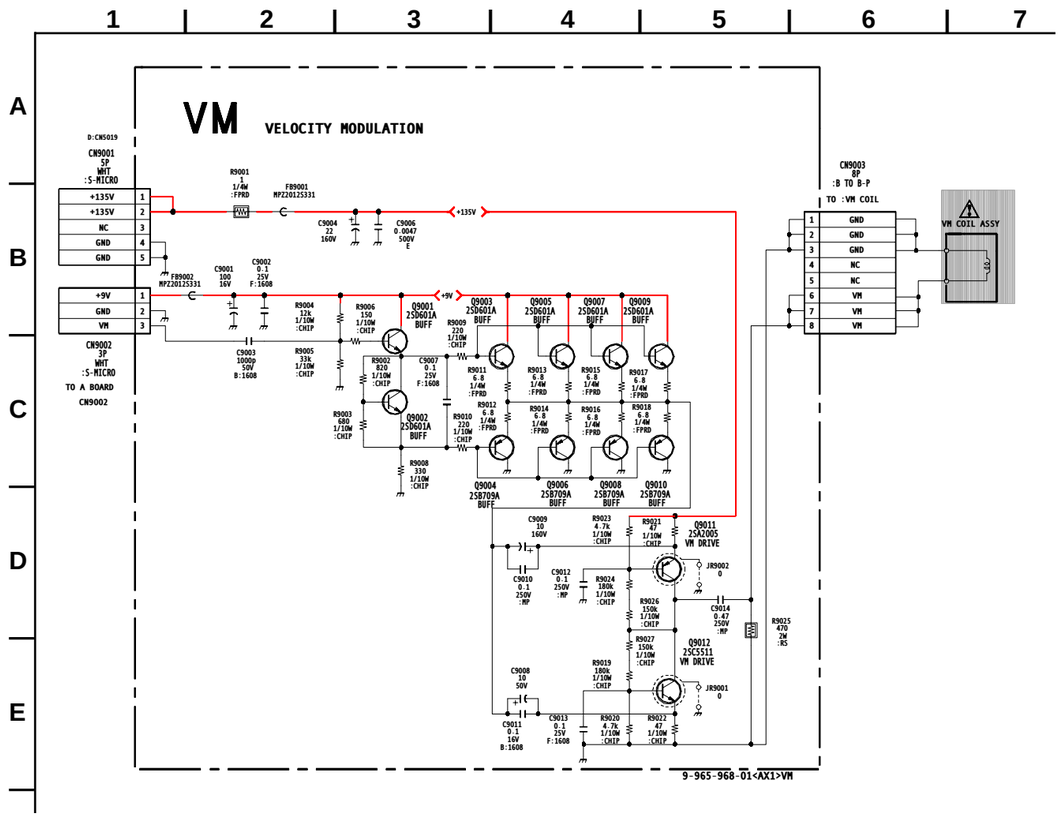
CB [B CRT DRIVE]

CG [G CRT DRIVE]

CONDUCTOR SIDE



VM BOARD SCHEMATIC DIAGRAM

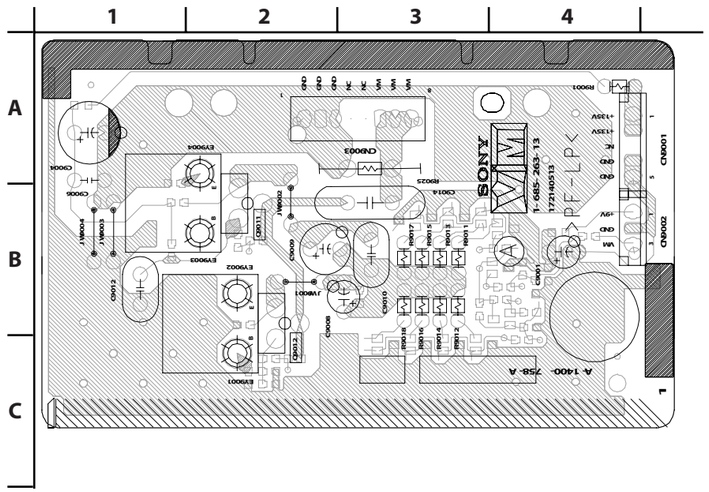


VM BOARD TRANSISTOR VOLTAGE LIST

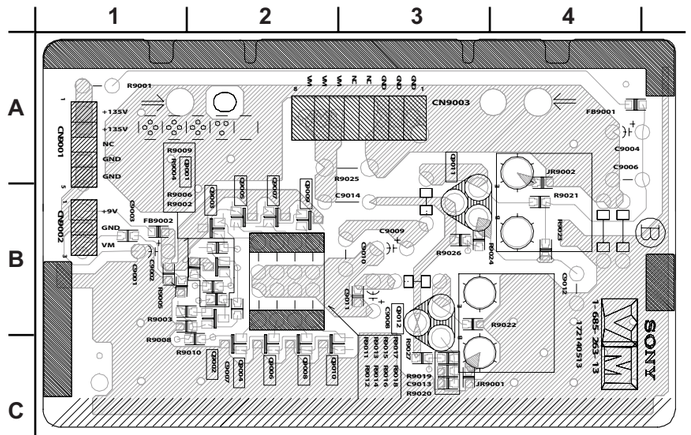
	B	C	E
Q9001	0.0	9.0	5.2
Q9002	3.6	5.2	4.5
Q9003	5.1	9.0	4.5
Q9004	3.6	GND	4.3
Q9005	5.1	9.0	4.5
Q9006	3.6	GND	4.3
Q9007	5.1	9.0	4.5
Q9008	3.6	GND	4.3
Q9009	5.1	9.0	4.5
Q9010	3.6	GND	4.3
Q9011	133	66.7	134
Q9012	0	66.7	0

All voltages are in V.

VM [VELOCITY MODULATION]
COMPONENT SIDE

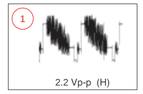


VM [VELOCITY MODULATION]
CONDUCTOR SIDE



A BOARD SCHEMATIC DIAGRAM (1 OF 6)

A BOARD WAVEFORMS

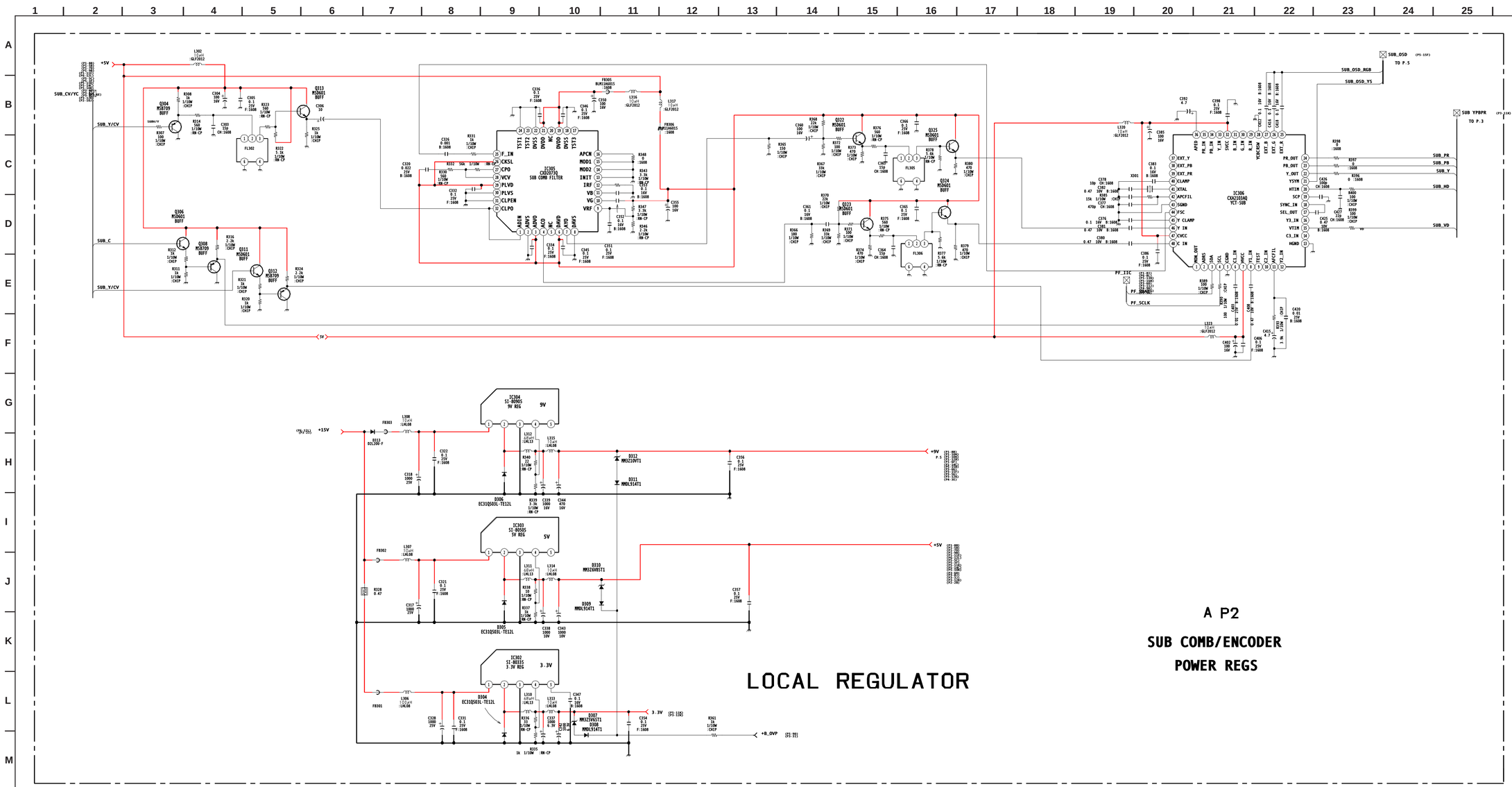


A P1

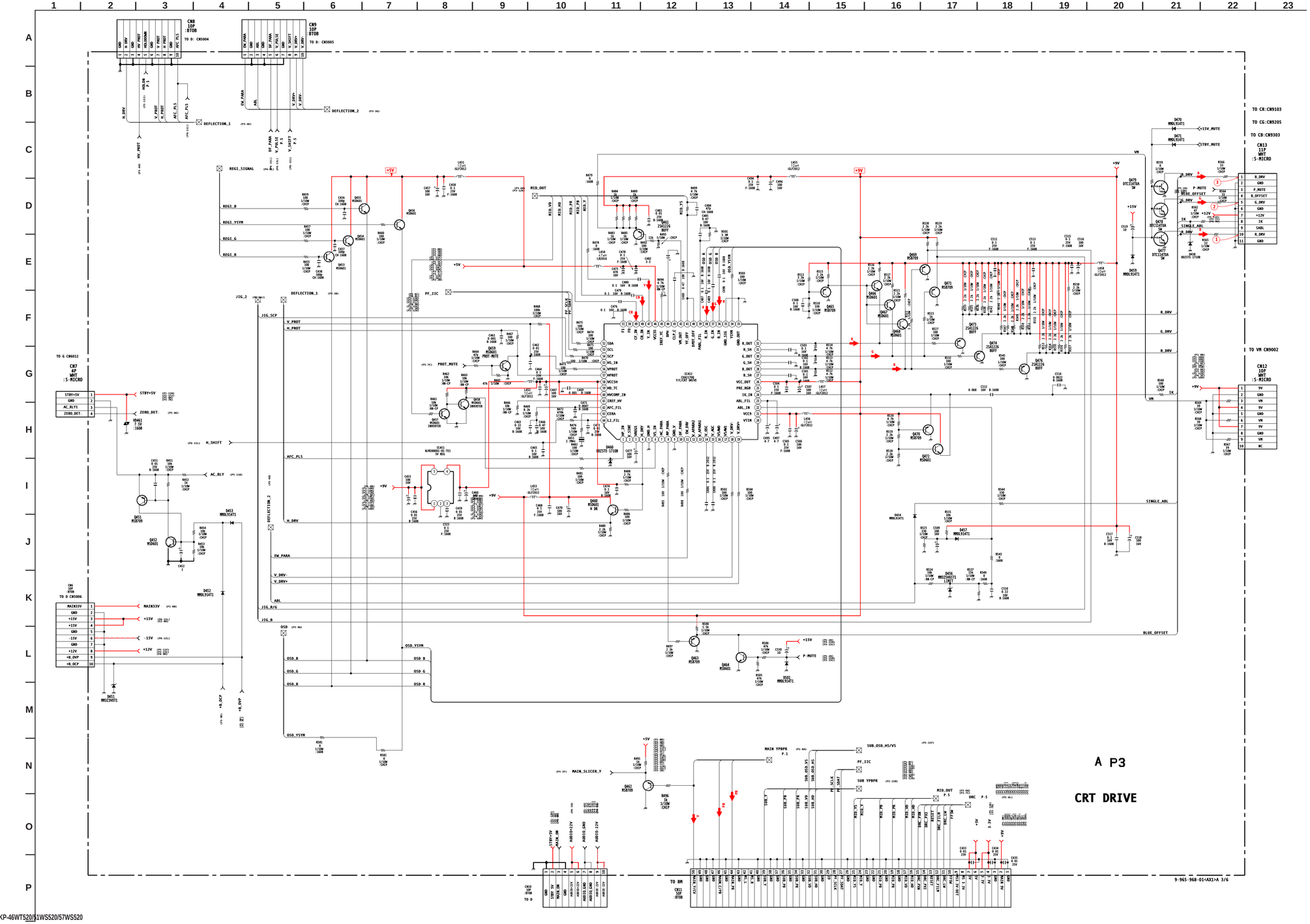
TERMINAL BLOCK
TUNER

9-965-968-01<AX1>A 1/6

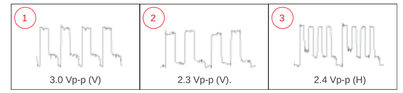
A BOARD SCHEMATIC DIAGRAM (2 OF 6)



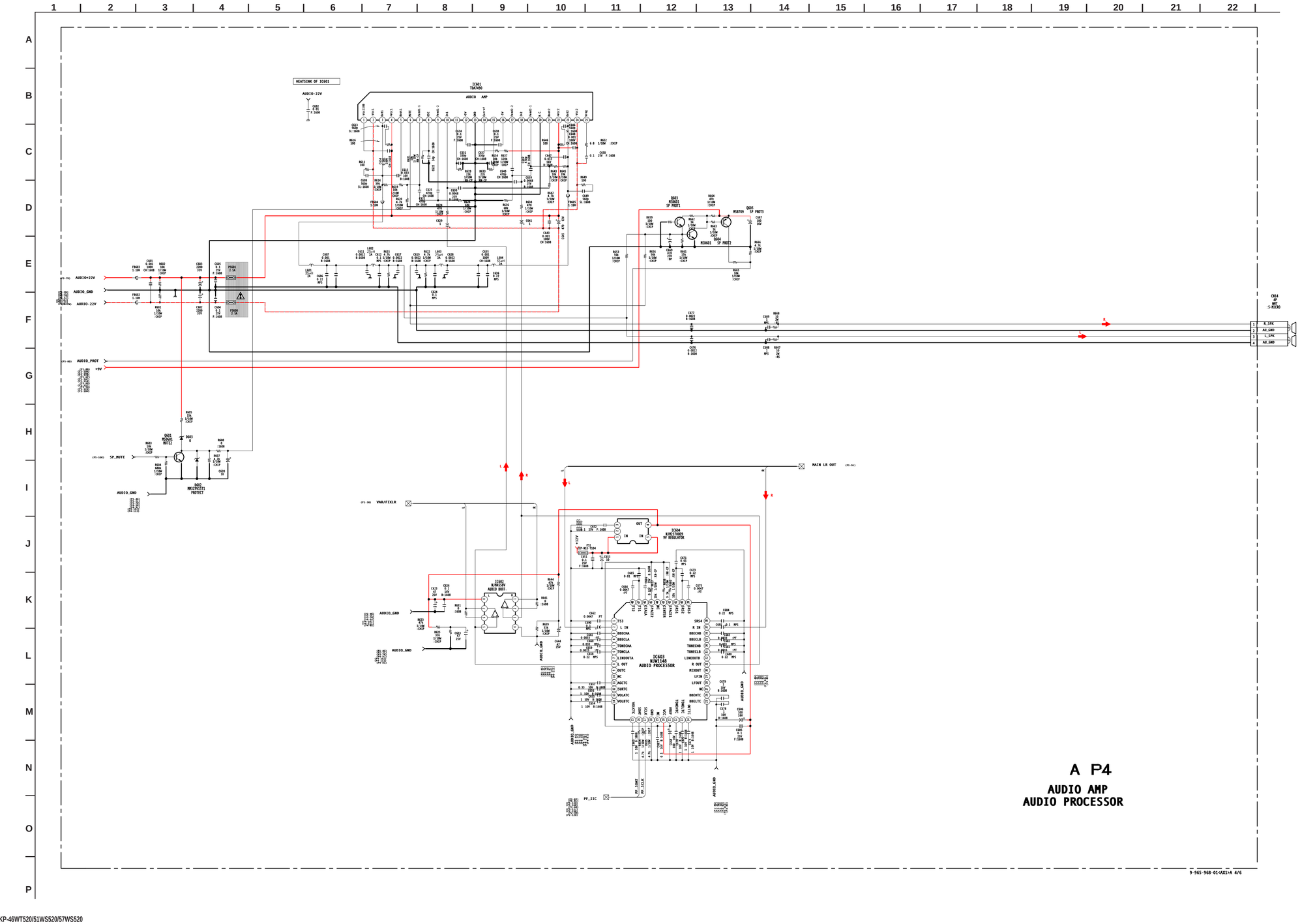
A BOARD SCHEMATIC DIAGRAM (3 OF 6)



A BOARD WAVEFORMS



A BOARD SCHEMATIC DIAGRAM (4 OF 6)

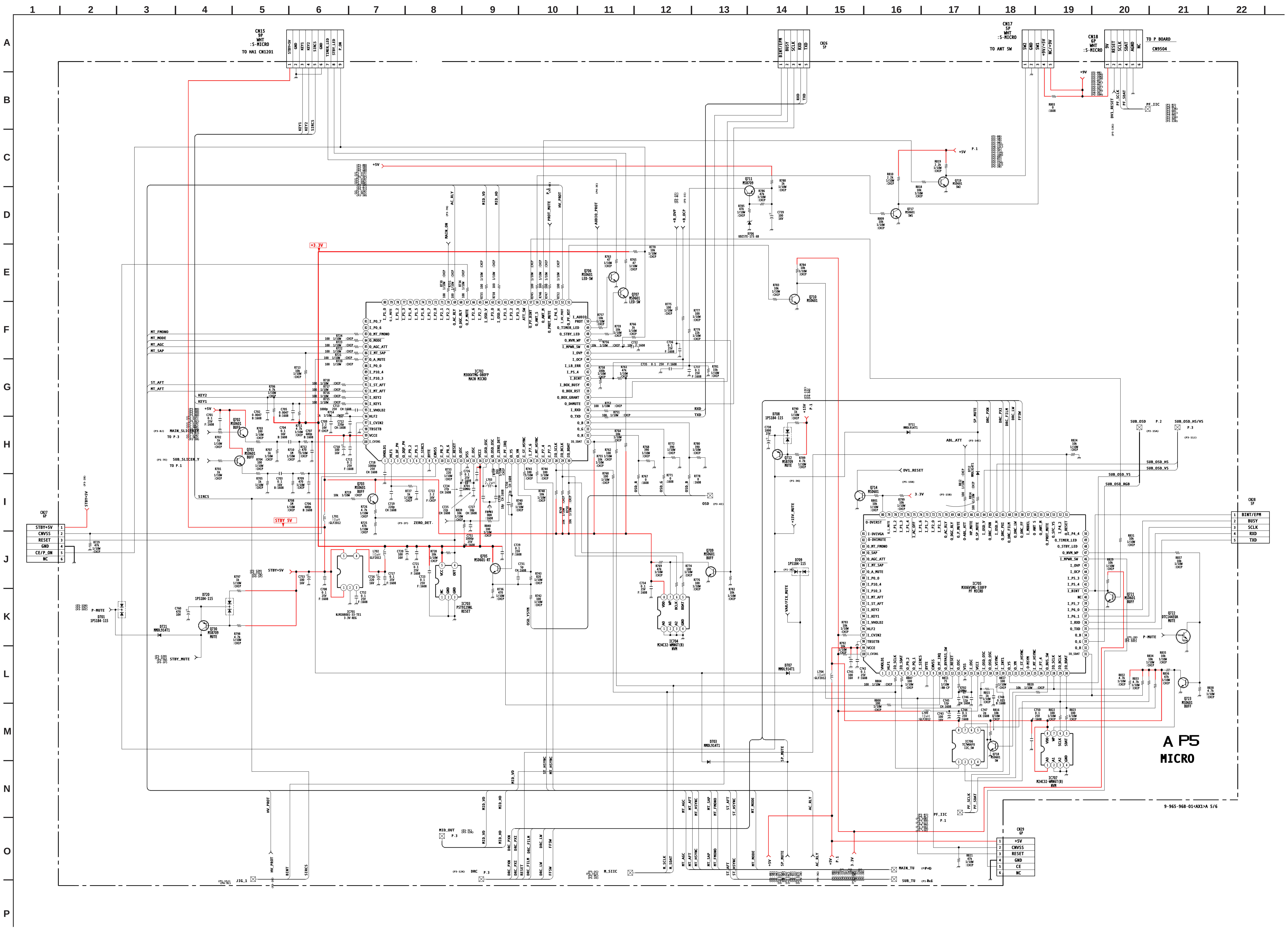


A P4

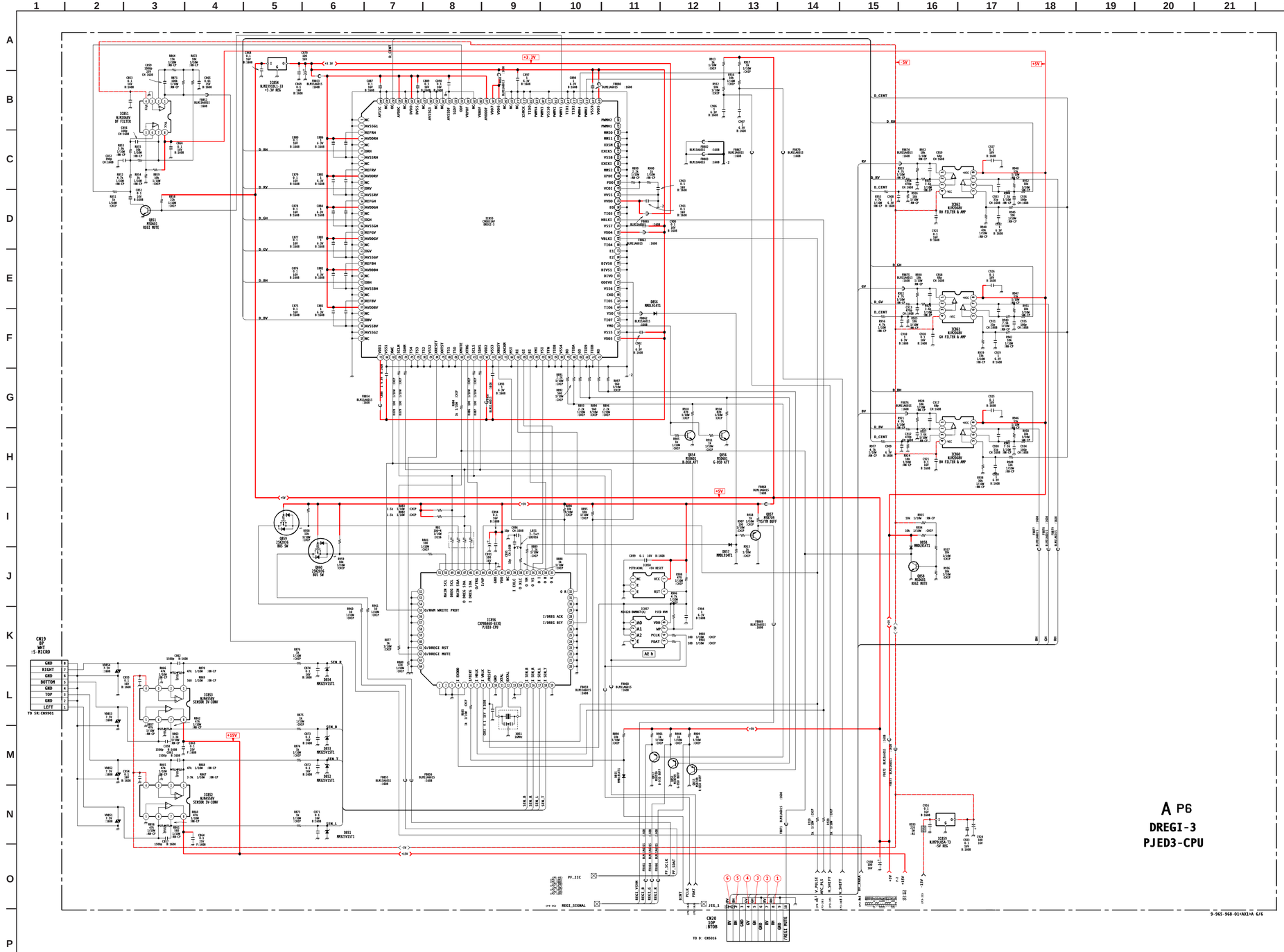
AUDIO AMP
AUDIO PROCESSOR

9-965-968-01<AX1>A 4/6

A BOARD SCHEMATIC DIAGRAM (5 OF 6)


CN15
9P
WHT
:S-MICRO
TO HA1 CN1201
STBY+5V
GND
KEY1
KEY2
SIRCS
TIMER_LED
STBY_LED
P_ON
CN26
5P
BINT/EPM
BUSY
SCLK
RXD
TXD
CN17
5P
WHT
:S-MICRO
TO ANT SW
SW2
SW1
+9V/+5V
NC/+9V
CN18
6P
WHT
:S-MICRO
9V
RESET
SDAT
AGND
NC
TO P BOARD
CN9504
PF_IIC
DV1_RESET
PF_SCLK
PF_SDAT
+5V
+9V
+3.3V
MAIN_ON
AC_RLY
MID_VD
MID_HD
PROT_MUTE
HV_PROT
AUDIO_PROT
+B_OVP
+B_OCP
Q711
MSB709
D706
UDZSTE-173.6B
Q719
MSD601
SW2
Q717
MSD601
SW1
Q706
MSD601
LED-SW
Q707
MSD601
LED-SW
Q710
MSD601
IC702
M306V7MG-080FP
MAIN MICRO
MT_FMONO
MT_MODE
MT_AGC
MT_SAP
ST_AFT
MT_AFT
MAIN_SLICER_Y
TO P.3
SUB_SLICER_Y
TO P.1
Q702
MSD601
BUFF
Q701
MSD601
BUFF
Q703
MSD601
BUFF
ZERO_DET
STBY 5V
CN27
6P
STBY+5V
CNVSS
RESET
GND
CE/P_ON
NC
IC701
NJM2880U1-33-TE1
3.3V-REG
IC703
PST9129NL
RESET
Q705
MSD601-RT
X701
10MHz
P-MUTE
D701
1PS184-115
D720
1PS184-115
D721
MMDL914T1
Q730
MSB709
MUTE
STBY_MUTE
IC704
M24C32-WMN6T(B)
NVM
Q709
MSD601
BUFF
OSD
D708
1PS184-115
Q712
MSB709
MUTE
+15V_MUTE
D709
1PS184-115
VAR/FIX_MUTE
D707
MMDL914T1
D703
MMDL914T1
D711
MMDL914T1
D712
MMDL914T1
ABL_ATT
DV1_RESET
Q714
MSD601
3.3V
IC705
M306V5MG-538FP
PF MICRO
X702
16MHz
IC706
TC7W66FU
I2C_SW
Q718
MSD601
SW
IC707
M24C32-WMN6T(B)
NVM
SUB_OSD
SUB_OSD_HS/VS
SUB_OSD_HS
SUB_OSD_VS
SUB_OSD_YS
SUB_OSD_RGB
CN28
5P
BINT/EPM
BUSY
SCLK
RXD
TXD
Q721
MSD601
BUFF
Q722
DTC144EUA
MUTE
Q723
MSD601
BUFF
SP_MUTE
DRC_PXN
DRC_PXI
DRC_FILM
DRC_LW
FFSW
MID_OUT
DRC
JIG_1
M_SIIC
M_SCLK
M_SDAT
MAIN_TU
SUB_TU
CN29
6P
+5V
CNVSS
RESET
GND
CE
NC
A P5
MICRO
9-965-968-01<AX1>A 5/6

A BOARD SCHEMATIC DIAGRAM (6 OF 6)



A BOARD WAVEFORMS

1 2.1 Vp-p (V)	2 2.3 Vp-p (V)	3 2.1 Vp-p (V)
4 2.5 Vp-p (V)	5 2.0 Vp-p (V)	6 2.3 Vp-p (V)

A BOARD IC VOLTAGE LIST

IC1		46	GND	11	4.5	2	9.0	8	2.8	5	9.0	45	4.2	IC602		36	4.3	2	0.0	IC854		41	2.2	88	GND	135	GND	36	0.0	IC859	
PIN	VOLT	47	1.1	12	GND	3	GND	9	NC	IC452		46	5.0	PIN	VOLT	37	4.3	3	0.0	PIN	VOLT	42	GND	89	0.0	136	GND	37	0.0	PIN	VOLT
1	2.4	48	0.0	13	4.5	4	9.0	10	NC	PIN	VOLT	47	3.8	1	4.8	38	0	4	GND	I	5.0	43	GND	90	3.3	137	GND	38	2.4	I	-15.0
2	GND	49	0.0	14	4.5	5	NC	11	2.3	1	0.0	48	4.4	2	4.5	39	4.3	5	5.0	O	3.3	44	GND	91	GND	138	GND	39	2.7	O	-5.0
3	2.0	50	5.0	15	GND	IC305		12	NC	2	N/C	49	5.2	3	4.5	40	4.3	6	5.0	G	GND	45	GND	92	GND	139	3.3	40	N/C	G	GND
4	0.0	51	0.0	16	5.2	PIN	VOLT	13	GND	3	0.0	50	N/C	4	GND	41	0	7	0.0	IC855		46	5.0	93	GND	140	GND	41	5.0	IC860	
5	0.0	52	0.0	17	0.0	1	1.0	14	NC	4	3.1	51	GND	5	4.6	42	4.3	8	5.0	PIN	VOLT	47	GND	94	GND	141	3.3	42	GND	PIN	VOLT
6	0.0	53	NC	18	GND	2	GND	15	0.5	5	GND	52	3.4	6	4.5	43	4.3	IC707		1	GND	48	GND	95	3.3	142	1.6	43	GND	1	2.8
7	2.0	54	NC	19	4.5	3	4.8	16	NC	6	3.1	53	3.4	7	4.8	44	N/C	PIN	VOLT	2	GND	49	GND	96	GND	143	GND	44	0.0	2	2.7
8	0.0	55	0.0	20	4.5	4	1.0	17	2	7	N/C	54	0.6	8	9.0	45	4.3	1	5.0	3	2.2	50	4.3	97	1.6	144	GND	45	0.0	3	2.6
9	0.0	56	0.0	21	GND	5	NC	18	3.1	8	3.6	55	8.9	IC603		46	4.3	2	GND	4	3.3	51	0.0	98	1.6	IC856		46	2.2	4	-5.0
10	GND	57	2.9	22	0.0	6	4.8	19	2.0	9	GND	56	4.3	PIN	VOLT	47	4.3	3	GND	5	GND	52	2.5	99	GND	PIN	VOLT	47	2.3	5	1.8
11	0.0	58	0.0	23	0.0	7	0.5	20	0.5	10	N/C	57	4.9	1	4.3	48	4.3	4	GND	6	1.7	53	2.5	100	GND	1	GND	48	4.3	6	1.8
12	0.0	59	0.0	24	GND	8	GND	21	0.0	11	0.0	58	3.7	2	4.3	IC604		5	4.4	7	GND	54	3.3	101	GND	2	GND	49	2.3	7	0.0
13	0.0	60	2.4	25	4.5	9	1.9	22	1.8	12	N/C	59	1.5	3	0.0	PIN	VOLT	6	0.0	8	GND	55	GND	102	GND	3	GND	50	4.4	8	5.0
14	2.5	61	5.0	26	4.5	10	2.6	23	2.1	13	N/C	60	1.5	4	4.3	1	11.0	7	4.9	9	2.2	56	0.0	103	GND	4	2.5	51	GND	IC861	
15	0.0	62	NC	27	9.0	11	0.9	24	2.0	14	2.4	61	8.9	5	0.0	2	GND	8	5.0	10	3.3	57	0.0	104	GND	5	GND	52	GND	PIN	VOLT
16	0.0	63	NC	28	4.5	12	2.0	25	3.4	15	4.9	62	2.9	6	0.0	3	0.0	IC851		11	GND	58	GND	105	GND	6	5.0	53	GND	1	2.8
17	0	64	2.5	29	4.5	13	GND	26	3.4	16	N/C	63	2.9	7	4.3	4	9.0	PIN	VOLT	12	1.7	59	0.0	106	GND	7	0.0	54	GND	2	2.7
18	2.0	65	1.1	30	GND	14	GND	27	3.4	17	N/C	64	2.7	8	0.0	5	11.0	1	5.0	13	GND	60	0.0	107	N/C	8	0.0	55	5.0	3	2.6
19	0.0	66	2.9	31	4.8	15	GND	28	GND	18	1.1	IC601		9	N/C	IC701		2	2.2	14	2.2	61	0.0	108	N/C	9	0.0	56	GND	4	-5.0
20	GND	67	1.3	32	4.7	16	GND	29	NC	19	4.9	PIN	VOLT	10	N/C	PIN	VOLT	3	GND	15	3.3	62	GND	109	3.3	10	GND	57	GND	5	1.8
21	GND	68	2.4	33	4.5	17	NC	30	NC	20	N/C	1	-22.00	11	1.4	1	5.0	4	1.1	16	GND	63	0.0	110	GND	11	2.2	58	N/C	6	1.8
22	2.0	69	2.4	34	GND	18	GND	31	NC	21	9.0	2	-22.00	12	0.8	2	GND	5	1.3	17	1.7	64	GND	111	0.4	12	2.1	59	GND	7	0.0
23	2.0	70	0.0	35	4.5	19	5.0	32	5.0	22	3.4	3	0.0	13	2.9	3	3.3	6	0.0	18	GND	65	GND	112	1.2	13	GND	60	GND	8	5.0
24	0.0	71	0.0	36	GND	20	NC	33	NC	23	5.0	4	22.1	14	2.9	4	3.3	7	0.0	19	2.2	66	GND	113	GND	14	GND	61	5.0	IC862	
25	GND	72	NC	37	4.5	21	5.0	34	NC	24	0.0	5	9.1	15	2.8	5	5.0	8	-5.0	20	3.3	67	0.0	114	GND	15	2.0	62	5.0	PIN	VOLT
26	0.0	73	NC	38	4.5	22	GND	35	NC	25	N/C	6	5.1	16	4.6	IC703		IC852		21	GND	68	GND	115	0.0	16	0.5	63	GND	1	2.8
27	0.0	74	0.0	39	4.5	23	NC	36	2.6	26	9.0	7	0.0	17	0	PIN	VOLT	PIN	VOLT	22	1.7	69	GND	116	N/C	17	5	64	GND	2	2.7
28	2.5	75	0.0	40	GND	24	GND	37	NC	27	0.9	8	2.7	18	GND	1	N/C	1	15.0	23	GND	70	GND	117	GND	18	1.7	IC857		3	2.6
29	GND	76	4.8	IC302		25	2.4	38	NC	28	0.3	9	0.0	19	N/C	2	GND	2	2.2	24	2.2	71	GND	118	N/C	19	GND	PIN	VOLT	4	-5.0
30	GND	77	4.7	PIN	VOLT	26	5.0	39	NC	29	5.0	10	0.0	20	9.0	3	GND	3	GND	25	3.3	72	0.0	119	N/C	20	GND	1	4.9	5	1.8
31	GND	78	5.0	1	15.0	27	2.2	40	1.7	30	5.7	11	0.0	21	4.3	4	3.3	4	0.0	26	GND	73	3.3	120	GND	21	GND	2	4.9	6	1.8
32	GND	79	2.4	2	3.3	28	2.2	41	1.7	31	1.3	12	5.3	22	3.3	5	3.3	5	0.5	27	1.7	74	GND	121	GND	22	GND	3	4.9	7	0.0
33	2.0	80	NC	3	GND	29	5.0	42	2.4	32	3.1	13	GND	23	3.3	IC704		6	0.0	28	GND	75	0.0	122	GND	23	GND	4	GND	8	5.0
34	2.5	IC2		4	3.3	30	GND	43	GND	33	GND	14	-20.7	24	4.9	PIN	VOLT	7	2.8	29	GND	76	GND	123	GND	24	GND	5	4.6	All voltages are in V.	
35	2.5	PIN	VOLT	5	15.0	31	GND	44	0.0	34	0.0	15	0.0	25	0.0	1	GND	8	-5.0	30	2.2	77	0.0	124	GND	25	GND	6	4.7		
36	GND	1	4.5	IC303		32	1.0	45	3.1	35	GND	16	-5.5	26	3.3	2	GND	IC853		31	3.3	78	GND	125	3.3	26	GND	7	4.7		
37	GND	2	GND	PIN	VOLT	IC306		46	2.8	36	2.3	17	0.0	27	N/C	3	GND	PIN	VOLT	32	GND	79	GND	126	3.3	27	0.0	8	4.9		
38	GND	3	0.0	1	15.0	PIN	VOLT	47	5.0	37	0.0	18	0.0	28	N/C	4	GND	1	15.0	33	1.7	80	N/C	127	3.3	28	N/C	IC858			
39	GND	4	4.5	2	5.0	1	NC	48	3.1	38	2.3	19	0.0	29	N/C	5	4.5	2	2.2	34	GND	81	GND	128	N/C	29	GND	PIN	VOLT		
40	2.1	5	4.5	3	GND	2	NC	IC451		39	2.1	20	0.0	30	N/C	6	4.5	3	GND	35	GND	82	2.5	129	GND	30	GND	1	NC		
41	2.5	6	GND	4	5.0	3	4.6	PIN	VOLT	40	2.8	21	9.3	31	4.3	7	4.9	4	0.0	36	GND	83	N/C	130	N/C	31	GND	2	GND		
42	0.0	7	4.5	5	NC	4	4.6	1	9.0	41	0.0	22	22.1	32	N/C	8	5.0	5	0.5	37	3.3	84	GND	131	0.0	32	0.0	3	GND		
43	0.0	8	4.5	IC304		5	GND	2	GND	42	0.0	23	0.0	33	4.3	IC706		6	0.0	38	GND	85	GND	132	N/C	33	0.0	4	4.9		
44	0.0	9	9.0	PIN	VOLT	6	2.8	3	5.0	43	3.3	24	-22.0	34	0	PIN	VOLT	7	2.8	39	4.9	86	GND	133	GND	34	0.0	5	5.0		
45	GND	10	4.5	1	15.0	7	4.9	4	5.0	44	0.0	25	-11.6	35	4.3	1	5.0	8	-5.0	40	1.9	87	GND	134	GND	35	0.0				

A BOARD TRANSISTOR VOLTAGE LIST

	B	C	E		B	C	E		B	C	E
Q1	0.1	7.5	GND	**Q313**	3.2	5.0	2.6	**Q603**	0.0	9.0	0.0
Q2	3.5	0.5	3.3	**Q322**	2.7	5.0	2.1	**Q604**	0.0	9.0	GND
Q3	5.9	GND	6.5	**Q323**	2.7	5.0	0.0	**Q605**	9.0	0.0	9.0
Q4	0.8	0.0	GND	**Q324**	1.9	5.0	1.2	**Q705**	0.0	3.3	0.4
Q5	0.0	0.0	GND	**Q325**	1.9	5.0	1.2	**Q706**	0.0	0.0	GND
Q6	2.8	GND	3.5	**Q451**	2.2	0.0	2.2	**Q707**	0.0	0.0	GND
Q7	6.5	9.0	3.9	**Q452**	0.0	2.2	GND	**Q710**	0.0	3.4	GND
Q9	4.5	9.0	3.9	**Q453**	0.7	5.0	0.0	**Q711**	4.3	4.9	4.9
Q10	3.3	GND	4.0	**Q454**	0.7	5.0	0.0	**Q712**	12.1	12.0	12.1
Q12	0.0	0.0	9.0	**Q455**	0.7	5.0	0.0	**Q714**	3.3	0.0	GND
Q13	2.0	GND	2.7	**Q456**	1.1	5.0	0.5	**Q717**	0.0	0.0	GND
Q14	3.4	0.0	3.3	**Q457**	0.0	0.6	GND	**Q718**	0.7	0.0	GND
Q16	8.8	9.0	9.0	**Q458**	0.6	0.0	GND	**Q719**	0.0	0.0	GND
Q20	0.0	8.8	0.0	**Q459**	0.0	0.0	GND	**Q721**	0.0	0.0	GND
Q21	2.3	GND	3.0	**Q460**	2.8	9.0	2.8	**Q722**	0.0	0.0	GND
Q23	1.2	GND	1.9	**Q461**	2.4	0.0	3.2	**Q723**	0.0	4.9	GND
Q24	0.0	GND	3.0	**Q462**	2.7	GND	2.0	**Q851**	0.0	0.2	GND
Q25	2.0	GND	3.1	**Q463**	2.9	GND	3.6	**Q852**	0.0	GND	0.7
Q26	1.5	GND	2.3	**Q464**	0.0	3.6	GND	**Q853**	0.0	GND	0.0
Q27	4.9	4.2	5.0	**Q465**	0.8	GND	1.5	**Q854**	0.0	0.0	GND
Q28	0.6	0.1	GND	**Q466**	1.5	8.7	1.9	**Q855**	0.0	GND	0.7
Q29	0.0	4.9	GND	**Q467**	1.5	8.7	1.9	**Q856**	0.0	0.0	GND
Q30	5.0	0.0	0.0	**Q468**	1.5	8.7	1.6	**Q857**	0.5	GND	1.1
Q31	0.6	0.0	GND	**Q469**	1.4	GND	2.0	**Q858**	0.0	4.3	GND
Q32	0.1	5.0	0.0	**Q470**	4.4	GND	4.0				
Q33	5.0	0.0	0.0	**Q471**	1.7	GND	2.3				
Q34	0.0	0.0	GND	**Q472**	2.2	9.0	4.0				
Q35	0.0	0.0	GND	**Q473**	1.9	0.0	2.7				
Q36	0.0	0.0	0.0	**Q474**	1.9	GND	0.0				
Q304	1.9	GND	0.0	**Q476**	1.6	GND	2.6				
Q306	1.9	5.0	0.0	**Q477**	0.0	2.5	GND				
Q308	1.2	GND	1.9	**Q478**	0.0	2.5	GND				
Q311	2.1	5.0	1.5	**Q479**	0.0	2.5	GND				
Q312	0.7	GND	1.3	**Q601**	0.0	5.2	GND				

All voltages are in V.

A BOARD LOCATOR LIST COMPONENT SIDE

DIODE		IC		TRANSISTOR	
D3	E-13	IC1	E-11	Q16	F-12
D7	E-12	IC2	C-11	Q20	F-12
D14	E-13	IC305	F-8	Q24	F-10
D35	G-13	IC306	E-6	Q26	F-10
D309	I-3	IC451	I-8	Q27	H-13
D310	I-3	IC452	G-6	Q28	G-13
D311	I-3	IC602	A-5	Q29	G-13
D312	I-3	IC603	B-5	Q304	Q304
D313	G-1	IC604	B-4	Q306	E-9
D454	H-4	IC701	C-5	Q308	D-9
D456	H-4	IC702	D-5	Q311	E-9
D457	H-5	IC704	E-4	Q312	D-9
D459	I-4	IC705	F-4	Q313	E-9
D460	G-6	IC706	F-4	Q322	E-8
D470	F-3	IC707	F-5	Q323	D-7
D471	F-3	IC851	I-8	Q324	E-7
D501	G-5	IC852	H-12	Q325	E-7
D602	C-3	IC853	H-12	Q453	I-6
D603	C-3	IC854	H-8	Q454	I-6
D703	C-4	IC855	G-9	Q455	I-5
D706	F-5	IC856	H-11	Q456	I-5
D708	F-3	IC857	H-10	Q457	I-7
D709	F-3	IC858	I-11	Q458	I-7
D711	F-4	IC859	I-13	Q459	H-7
D721	F-3	IC860	I-10	Q461	I-6
D851	F-4	IC861	I-10	Q464	G-6
D852	H-12	IC862	I-8	Q466	I-5
D853	I-12			Q467	H-5
D854	I-12			Q468	H-5
D855	I-12			Q473	I-5
D856	G-10			Q474	I-5
D857	G-10			Q476	H-5
D858	I-11			Q601	C-3
				Q705	E-4
				Q711	E-5
				Q712	F-3
				Q714	F-3
				Q718	G-4
				Q723	F-5
				Q851	H-8
				Q852	H-9
				Q853	H-9
				Q854	H-9
				Q855	H-8
				Q856	H-8
				Q857	G-10
				Q858	I-12

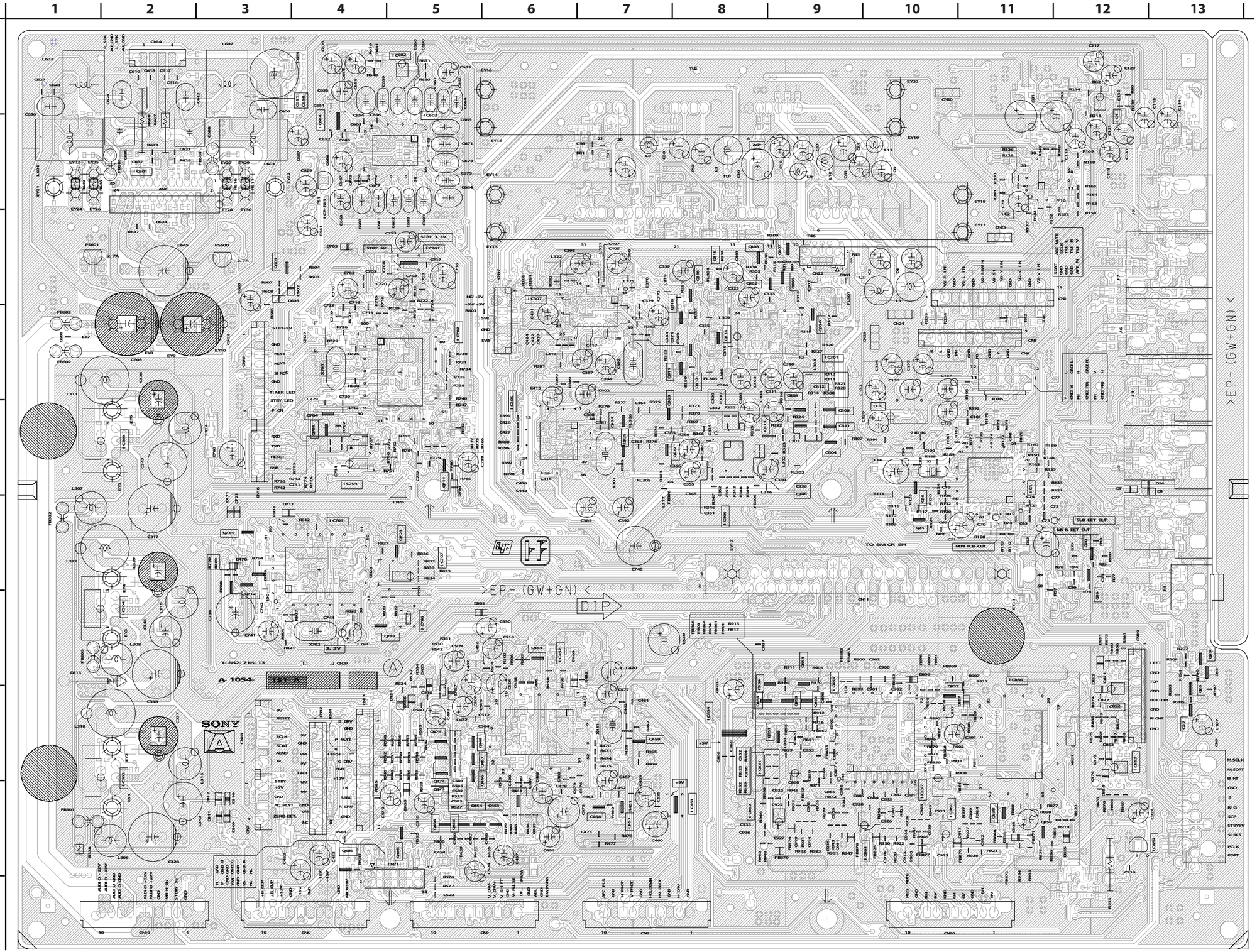
A BOARD LOCATOR LIST CONDUCTOR SIDE

DIODE		IC		TRANSISTOR	
D2	E-1	IC302	H-13	Q703	C-10
D3	E-2	IC303	E-13	Q706	D-8
D4	E-2	IC304	F-13	Q707	D-8
D5	E-2	IC601	C-12	Q709	E-9
D6	F-2	IC703	D-9	Q710	F-10
D8	F-1	**TRANSISTOR**		Q717	C-8
D9	F-2	Q1	C-6	Q719	D-8
D10	F-2	Q2	C-6	Q721	F-10
D11	E-2	Q3	B-7	Q722	F-10
D12	D-2	Q4	B-7	Q730	E-12
D13	D-2	Q5	F-2	Q859	I-2
D15	E-2	Q6	B-7	Q860	I-3
D16	D-3	Q7	G-3		
D17	D-3	Q9	F-2		
D18	D-3	Q10	G-2		
D19	D-3	Q12	F-2		
D20	A-1	Q13	F-2		
D21	A-2	Q14	B-7		
D23	C-2	Q21	F-3		
D24	D-2	Q23	F-3		
D25	D-2	Q25	F-4		
D26	C-2	Q30	G-2		
D27	C-2	Q31	G-1		
D28	C-2	Q32	G-1		
D36	C-1	Q33	G-1		
D37	B-2	Q34	B-1		
D38	D-1	Q35	B-1		
D39	C-2	Q36	A-1		
D40	C-4	Q451	I-11		
D41	C-4	Q452	I-11		
D42	F-1	Q460	G-7		
D43	G-2	Q462	G-3		
D44	C-1	Q463	G-7		
D45	C-1	Q465	I-9		
D304	H-12	Q469	H-9		
D305	D-12	Q470	G-8		
D306	F-12	Q471	H-9		
D307	I-11	Q472	G-8		
D308	I-11	Q477	H-9		
D451	I-11	Q478	H-9		
D452	I-11	Q479	H-9		
D453	I-11	Q603	A-11		
D701	F-11	Q604	A-11		
D707	F-11	Q605	A-10		
D712	F-10	Q701	D-10		
D720	E-12	Q702	C-11		

A

[TERMINAL BLOCK, TUNER
SUB COMB/ENCODER, POWER REGS,
CRT DRIVE, AUDIO AMP, AUDIO PROCESSOR
MICRO, DREGI-3, PJED3-CPU]

COMPONENT SIDE



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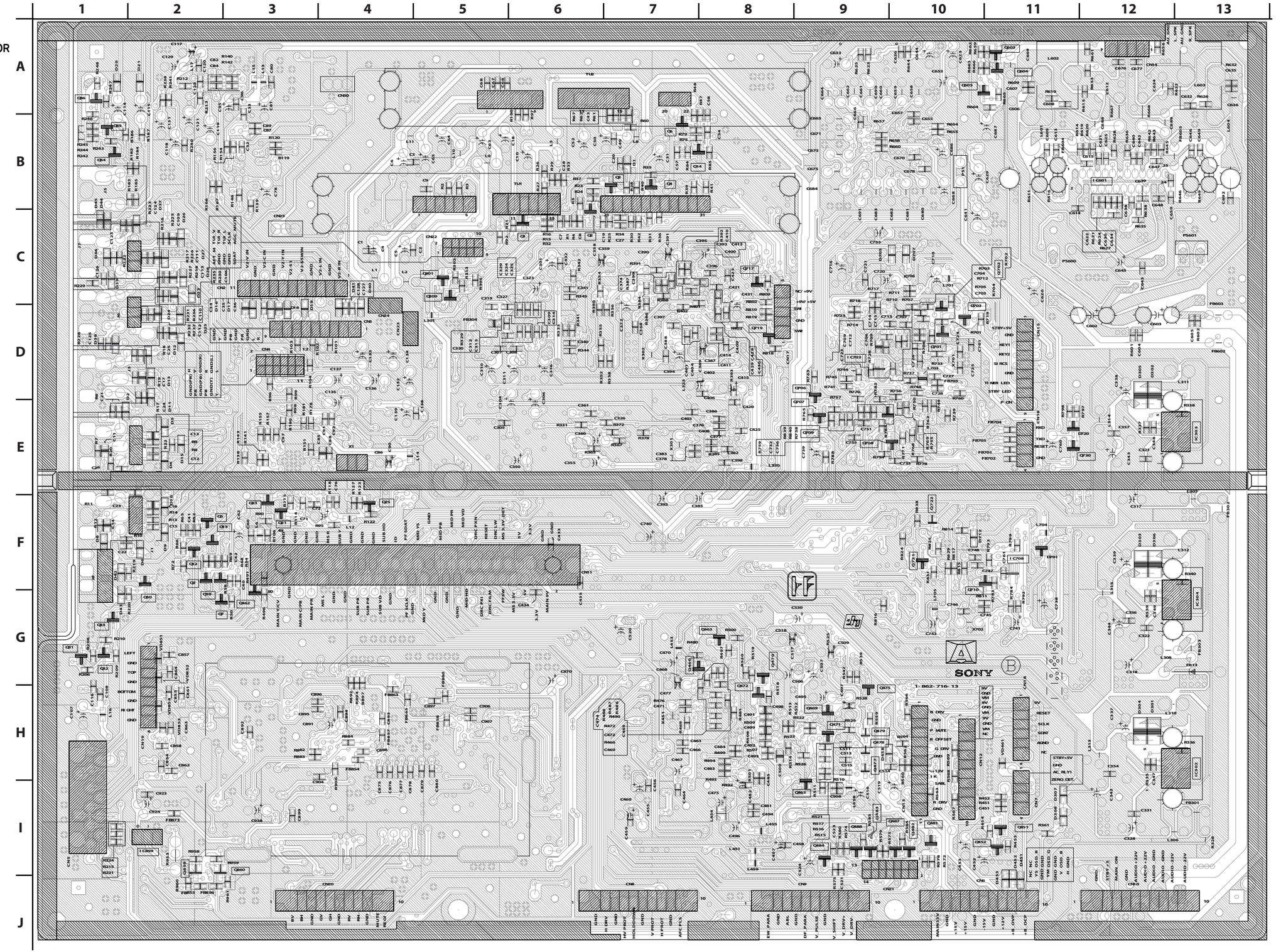
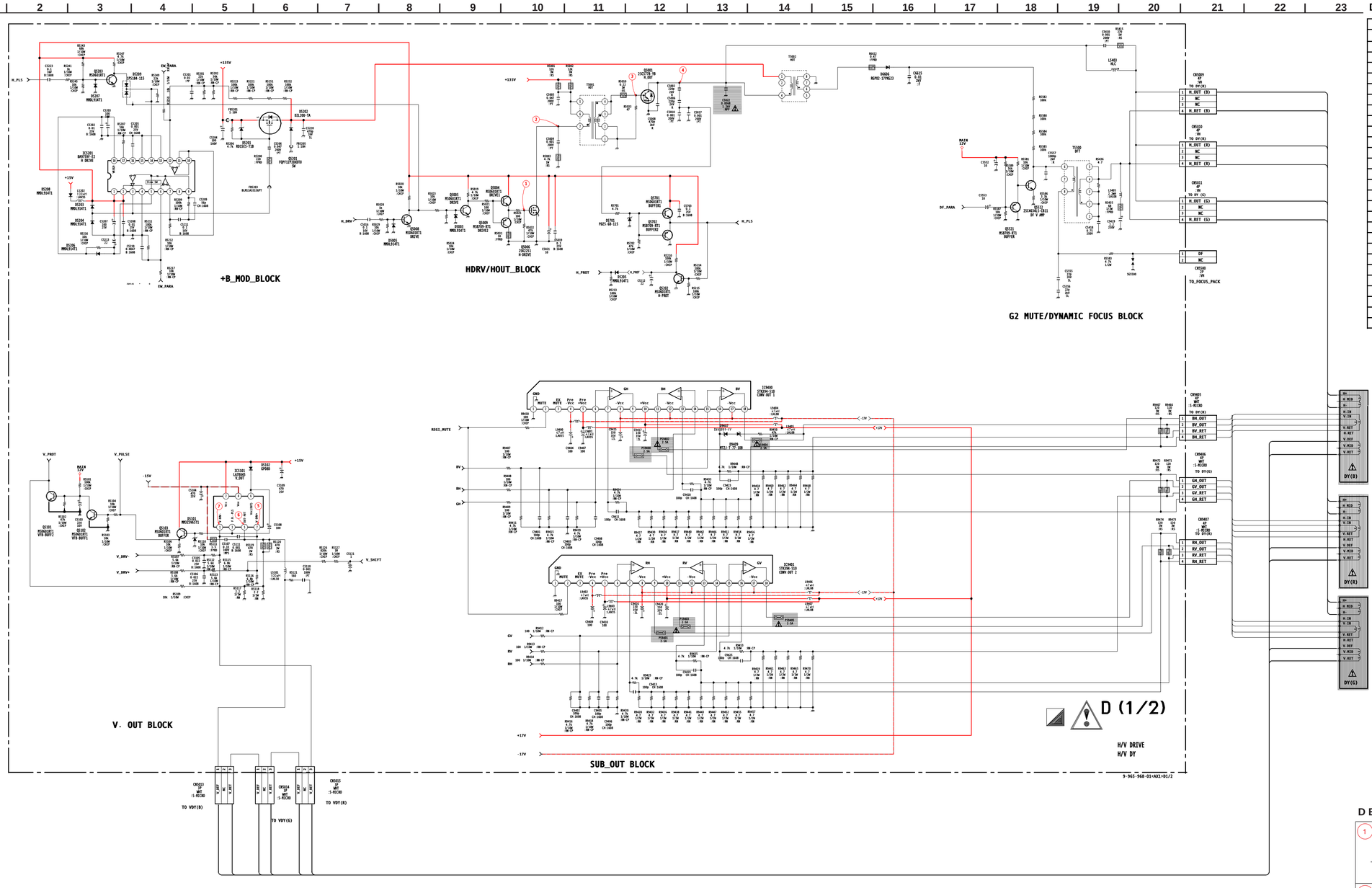
[TERMINAL BLOCK, TUNER
SUB COMB/ENCODER, POWER REGS,
CRT DRIVE, AUDIO AMP, AUDIO PROCESSOR
MICRO, DREGI-3, PJED3-CPU]

CONDUCTOR SIDE



D BOARD SCHEMATIC DIAGRAM (1 OF 2)



D BOARD IC VOLTAGE LIST

IC5101		IC6400		IC6503		IC8002		IC8005		IC9401	
PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT	PIN	VOLT
1	1.2	1	2.8	1	134.0	1	2.8	1	2.5	1	GND
2	15.0	2	1.8	2	N/C	2	1.8	2	GND	2	4.3
3	-13.1	3	2.2	3	N/C	3	2.2	3	9.9	3	N/C
4	-15.0	4	2.5	4	N/C	4	2.5	**IC8104**		4	-17.0
5	0.0	5	GND	5	2.5	5	GND	**PIN**	**VOLT**	5	17.0
6	14.6	6	0.0	6	1	6	0.0	1	2.5	6	-0.1
7	1.2	7	4.6	7	GND	7	4.6	2	GND	7	-0.1
IC5201		8	17.9	8	12	8	17.9	3	2.5	8	-17.0
PIN	**VOLT**	9	0.0	**IC6601**		9	0.0	**IC9400**		9	0.0
1	15.0	10	10.5	**PIN**	**VOLT**	10	10.5	**PIN**	**VOLT**	10	17.0
2	15.0	11	GND	1	15.0	11	GND	1	GND	11	0.5
3	5.8	12	4.8	2	6.35	12	4.8	2	4.3	12	-17.0
4	GND	13	N/C	3	GND	13	N/C	3	N/C	13	0.3
5	7.9	14	151.8	4	6.35	14	151.8	4	-17.0	14	0.3
6	3.8	15	142.2	5	N/C	15	142.2	5	17.0	15	0
7	3.8	16	146.3	**IC6801**		16	146.3	6	-0.3	16	0
8	N/C	17	N/C	**PIN**	**VOLT**	17	N/C	7	-0.3	17	-17.0
9	3.9	18	342.0	1	134.0	18	N/C	8	-17.0	18	0.1
10	3.6	**IC6501**		2	15.4	**IC8004**		9	-0.5	All voltages are in V.	
11	3.6	**PIN**	**VOLT**	3	GND	**PIN**	**VOLT**	10	17.0		
12	3.6	I	15.0	**IC8001**		1	6.9	11	0.1		
13	GND	O	12.0	**PIN**	**VOLT**	2	6.9	12	-17.0		
14	7.1	GND	GND	1	0.1	3	6.9	13	0.0		
15	GND			2	2.5	4	GND	14	0.0		
16	3.2			3	2.1	5	6.9	15	0.0		
17	2.6			4	GND	6	6.9	16	0.0		
18	9.1			5	2.3	7	6.9	17	-17.0		
				6	2.5	8	15	18	0.1		
				7	0						
				8	17.5						

D BOARD TRANSISTOR VOLTAGE LIST

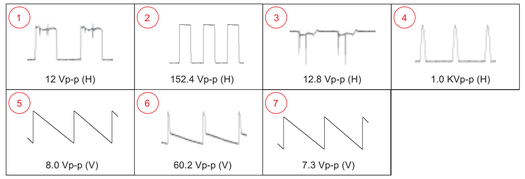
	B	C	E		B	C	E
Q5001	0.0	84.3	GND	**Q6403**	157.0	156.0	GND
Q5004	3.8	12.0	3.8	**Q6404**	0.0	0.0	GND
Q5005	0.2	3.8	GND	**Q6802**	15.4	0.0	15.4
Q5008	0.0	2.1	GND	**Q6803**	133.0	3.7	132.0
Q5009	3.8	0.0	3.8	**Q8003**	0.1	2.6	GND
Q5101	0.1	0.8	GND	**Q8004**	0.1	2.6	GND
Q5102	0.0	0.1	GND	**Q8007**	0.6	0.1	GND
Q5103	0.0	15.0	0.2	**Q8008**	0.6	0.1	GND
Q5202	0.6	0.0	GND	**Q8009**	2.6	15.0	2.6
Q5203	0.9	9.0	GND	**Q8010**	0.6	0.1	GND
Q5406	2.7	76.7	2.7	**Q8011**	12.0	0.0	12.0
Q5521	14.6	GND	14.6	**Q8021**	12.0	0.0	12.0
Q5522	3.1	191.6	2.8	**Q8028**	0.0	11.7	GND
Q5701	7.4	12.0	7.2	**Q8034**	0.0	12.0	GND
Q5702	7.4	GND	7.2	**Q8035**	11.6	2.5	12.0
Q6402	5.5	0.0	GND				

All voltages are in V.

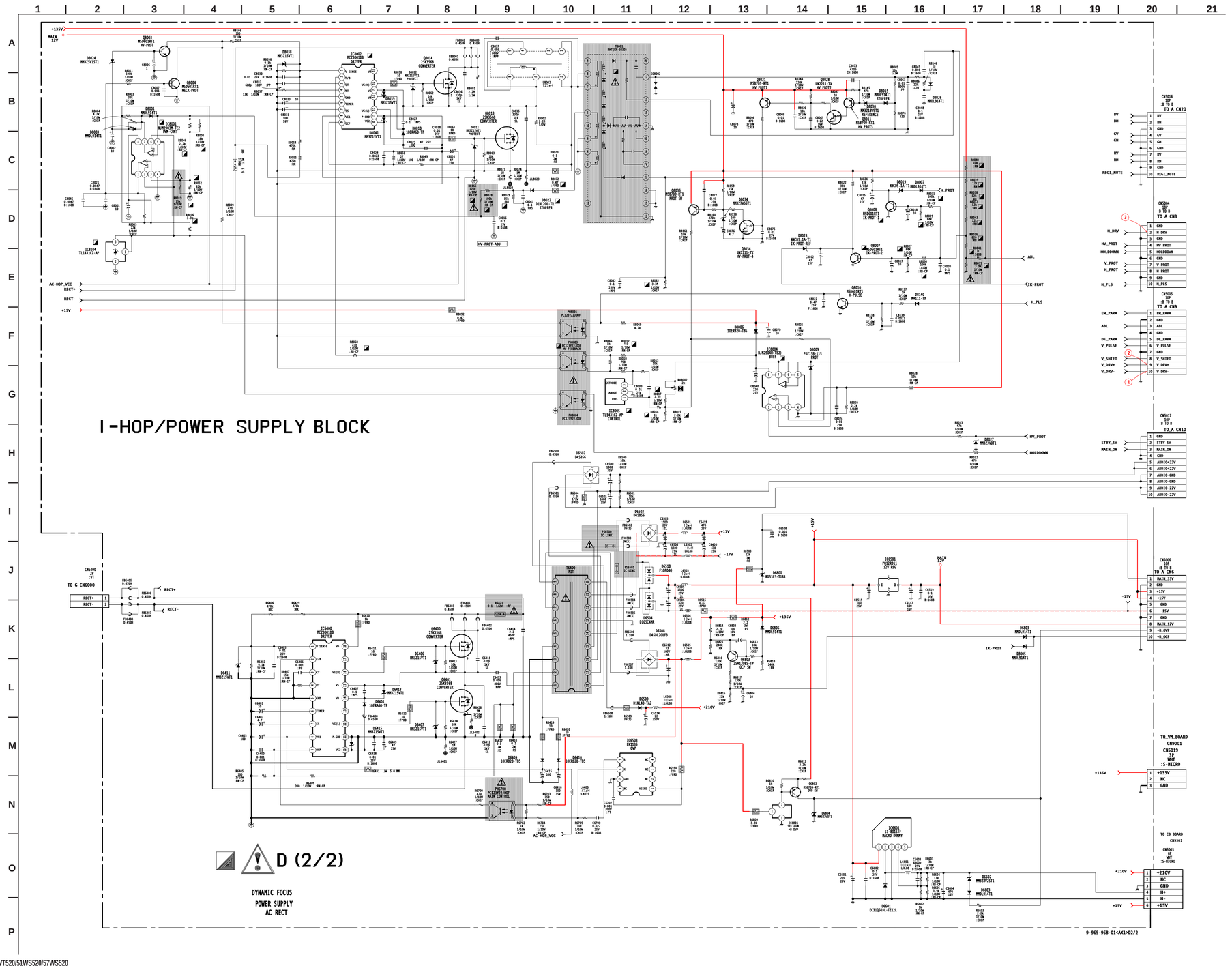
	D	G	S
Q5006	64.0	3.8	GND
Q5201	115.0	131.0	135.0
Q6400	306.0	145.0	140.0
Q6401	140.0	4.8	GND
Q8013	136.0	4.5	GND
Q8014	305.0	131.0	136.0

All voltages are in V.

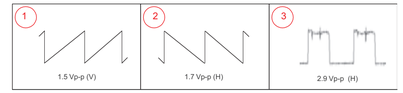
D BOARD W AVEFORMS



D BOARD SCHEMATIC DIAGRAM (2 OF 2)



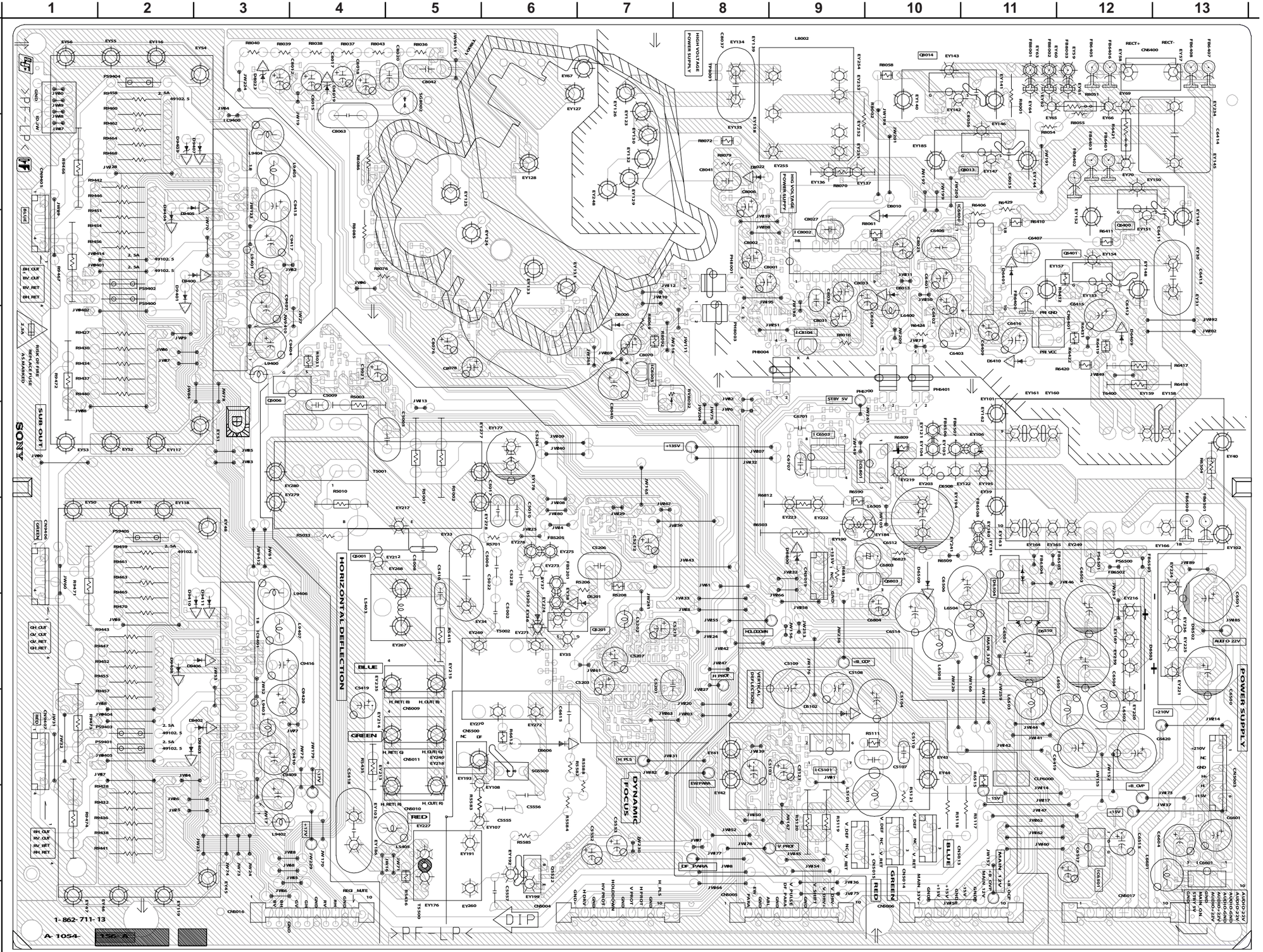
D BOARD WAVEFORMS



D

[H/V DRIVE, H/V DY, DYNAMIC FOCUS, POWER SUPPLY, AC RECT]

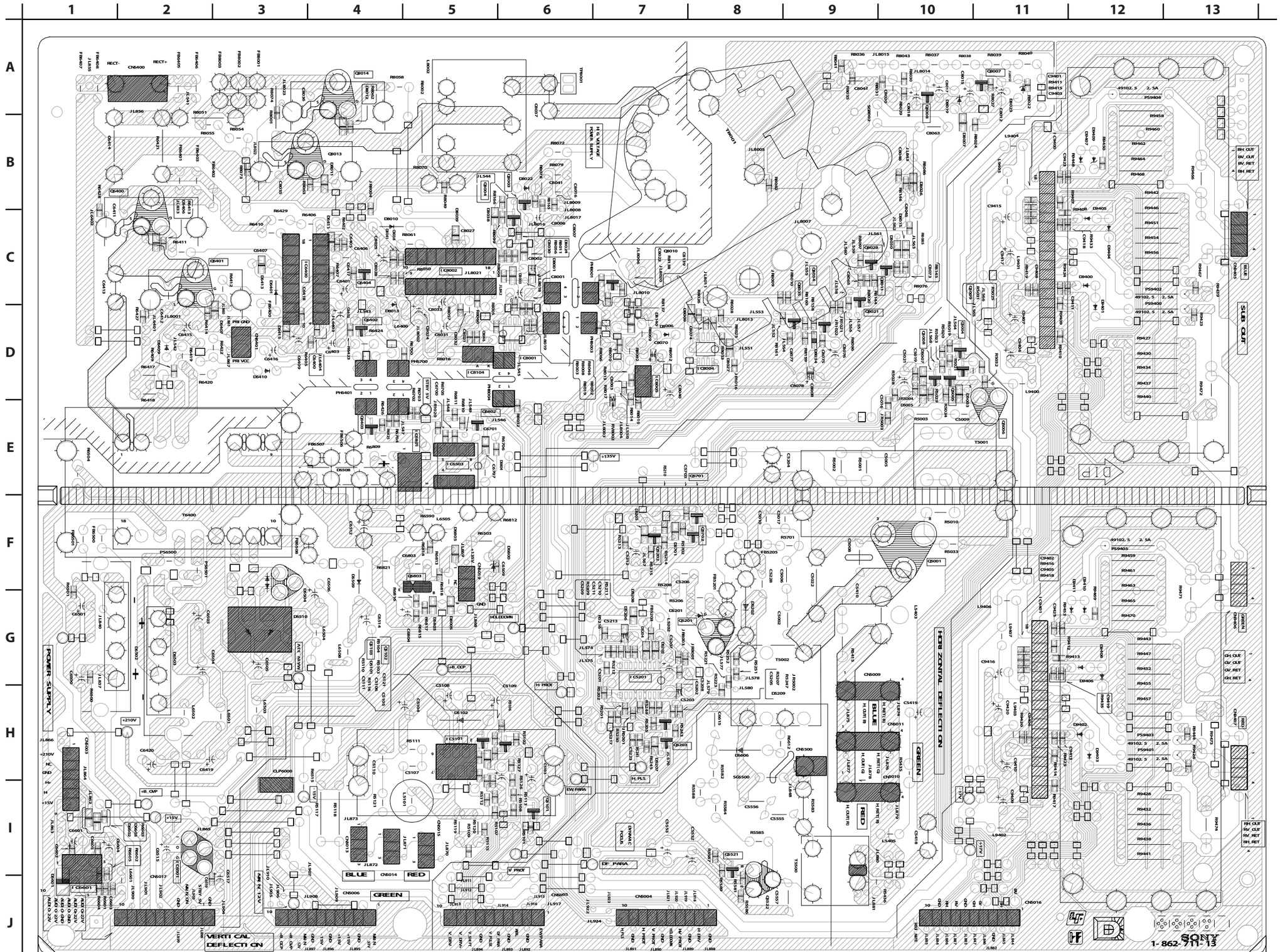
COMPONENT SIDE



D

[H/V DRIVE, H/V DY, DYNAMIC FOCUS, POWER SUPPLY, AC RECT]

CONDUCTOR SIDE



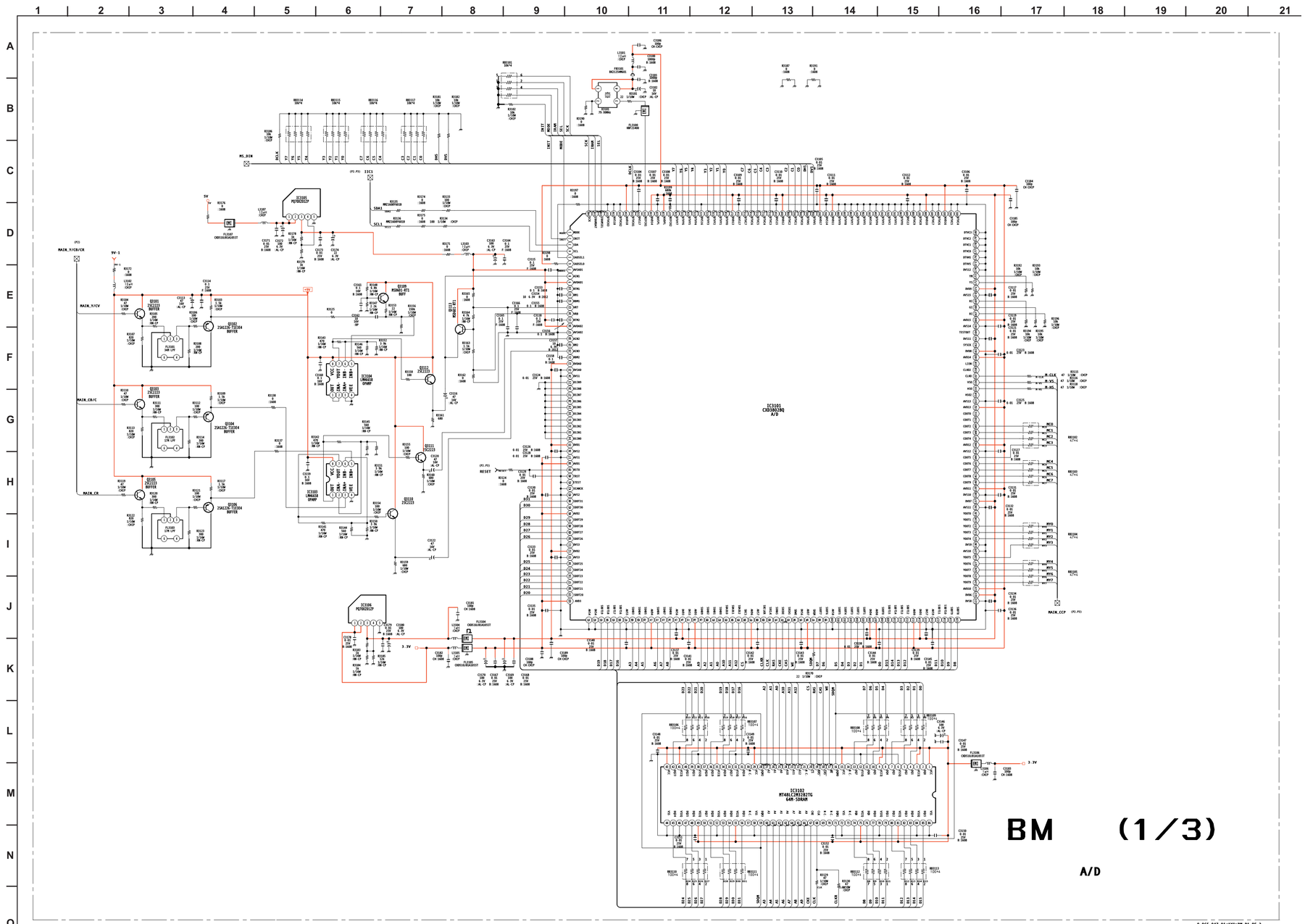
D BOARD LOCATOR LIST CONDUCTOR SIDE

DIODE		DIODE		TRANSISTOR	
D5003	D-10	D8010	C-4	Q5001	F-10
D5005	E-10	D8011	B-4	Q5004	D-10
D5101	G-4	D8012	A-4	Q5005	D-10
D5102	H-5	D8015	C-10	Q5006	E-11
D5201	G-8	D8019	A-10	Q5008	D-10
D5202	G-8	D8022	B-6	Q5009	C-11
D5203	G-7	D8023	B-11	Q5101	I-6
D5204	G-7	D8024	C-6	Q5102	G-4
D5205	F-7	D8026	B-10	Q5103	G-4
D5206	G-7	D8027	D-8	Q5201	G-8
D5207	H-7	D8030	C-10	Q5202	F-7
D5208	G-7	D8034	D-9	Q5203	H-7
D5209	H-8	D8038	C-5	Q5521	I-8
D5701	F-7	D8039	C-5	Q5522	J-8
D6401	C-3	D8041	C-4	Q5701	E-7
D6406	B-2	D8140	D-7	Q5702	F-8
D6407	D-2	D9407	B-12	Q6400	B-1
D6409	D-2	D9409	B-12	Q6401	C-2
D6410	D-3	IC		Q6402	D-4
D6411	C-4	IC5101	H-5	Q6403	E-4
D6413	C-3	IC5201	G-7	Q6404	C-4
D6415	D-3	IC6400	C-4	Q6802	E-6
D6502	G-2	IC6501	J-2	Q6803	F-5
D6503	G-2	IC6503	E-5	Q8003	B-6
D6504	D-3	IC6601	J-1	Q8004	B-4
D6508	E-4	IC6801	E-5	Q8007	A-11
D6509	F-4	IC8001	D-6	Q8008	A-10
D6510	G-3	IC8002	C-5	Q8010	C-7
D6601	J-1	IC8004	D-8	Q8011	C-10
D6602	I-2	IC8005	D-7	Q8013	B-4
D6603	I-2	IC8104	D-5	Q8014	A-4
D6606	H-8	IC9400	B-11	Q8021	D-10
D6800	F-6	IC9401	G-11	Q8028	C-9
D6803	G-5			Q8034	C-9
D6804	E-5			Q8035	C-9
D6805	F-5				
D8001	C-6				
D8003	C-6				
D8005	G-5				
D8006	D-7				
D8007	B-10				
D8009	D-8				

NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BM BOARD SCHEMATIC DIAGRAM (1 OF 3)

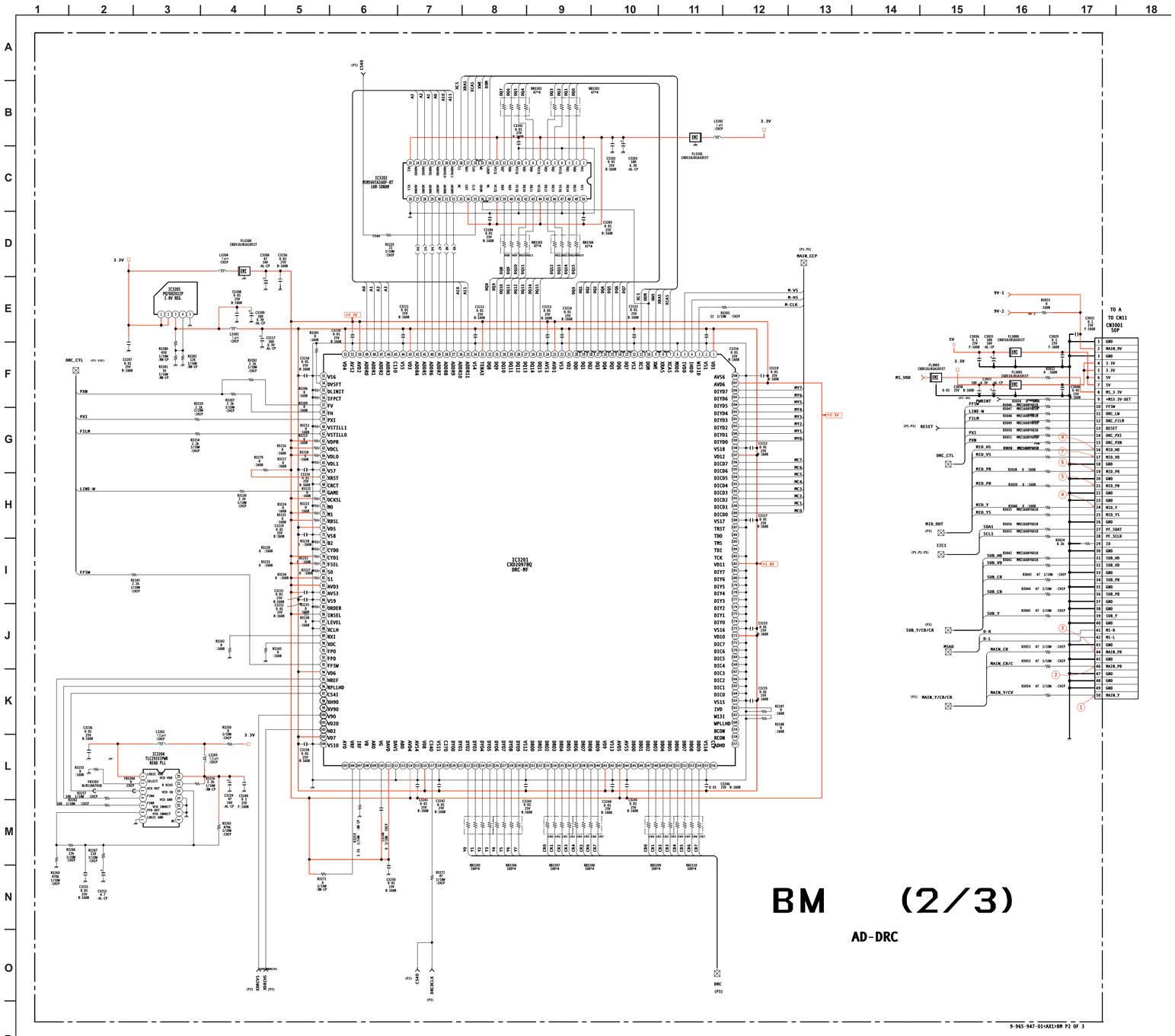
Due to the complexity of this board, performing component level field repairs is not recommended.
If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.



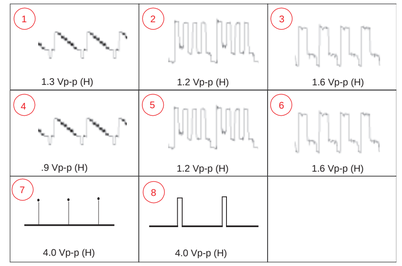
NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BM BOARD SCHEMATIC DIAGRAM (2 OF 3)

Due to the complexity of this board, performing component level field repairs is not recommended.
If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.



BM BOARD WAVEFORMS



NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BM BOARD SCHEMATIC DIAGRAM (3 OF 3)

Due to the complexity of this board, performing component level field repairs is not recommended.
If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

BM (3/3)

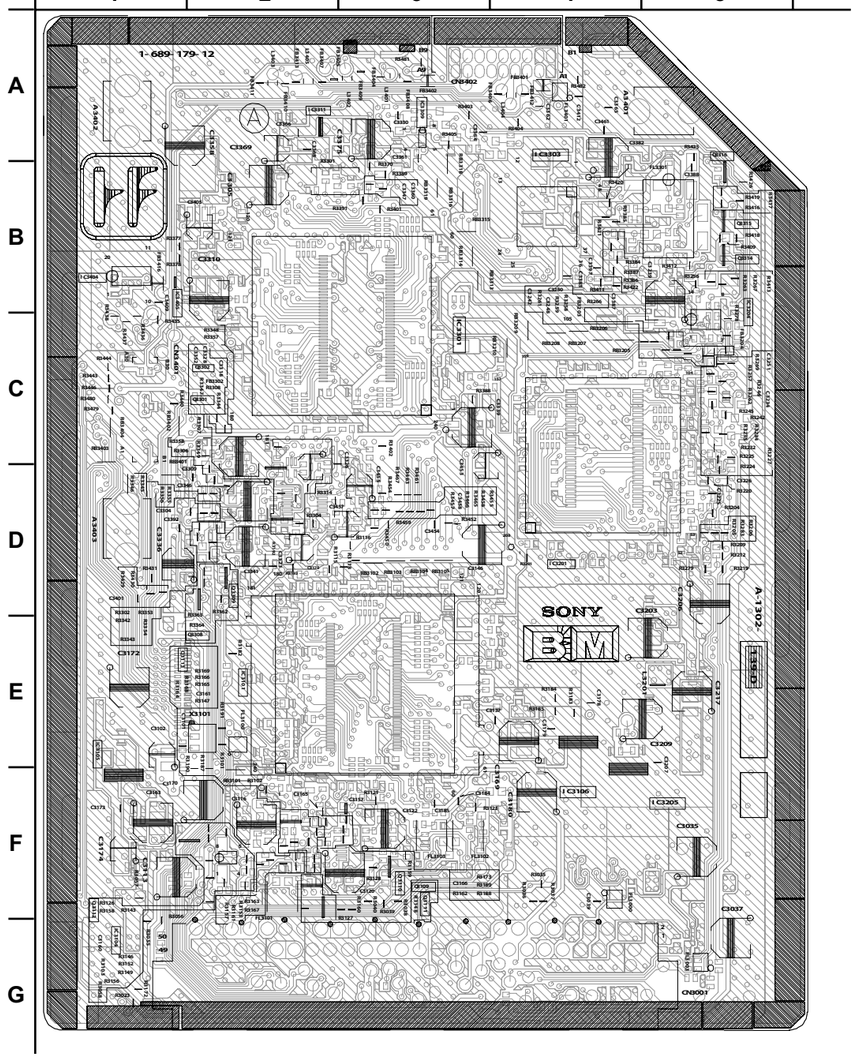
MID-XA

9-965-947-01<AX1>BM P3 OF 3

NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

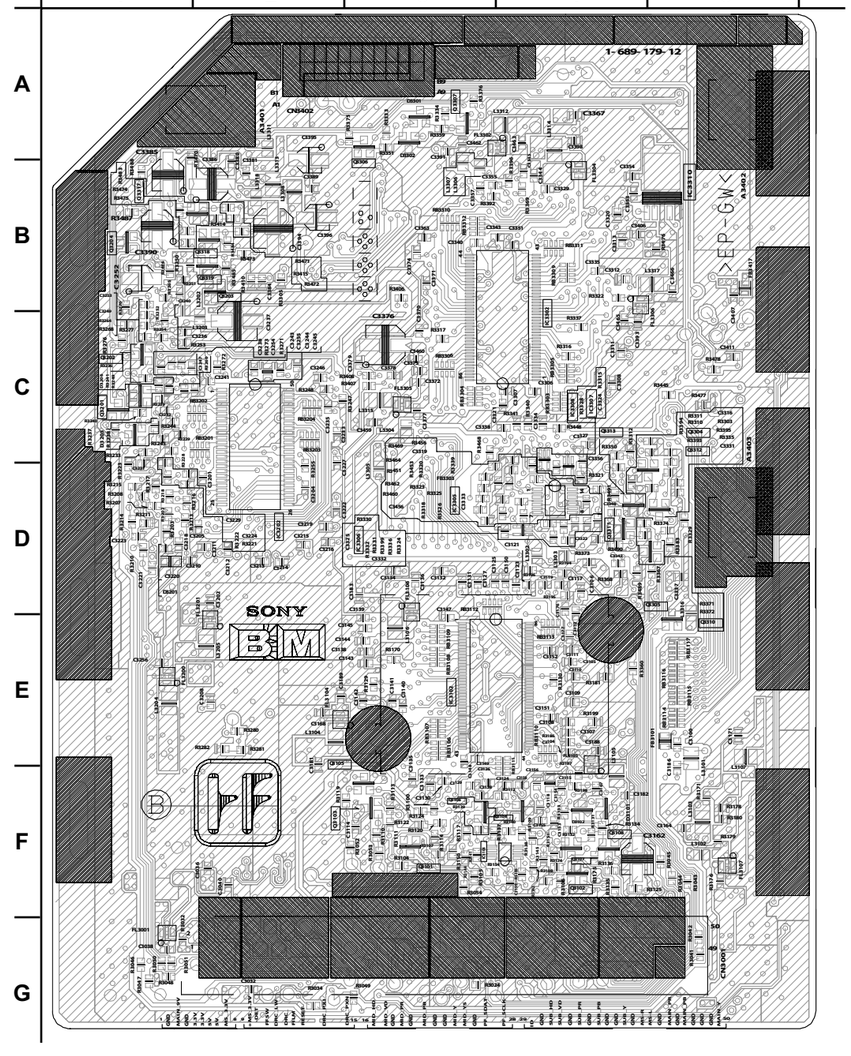
BM [A/D, AD-DRC, MID-XA]

COMPONENT SIDE



BM [A/D, AD-DRC, MID-XA]

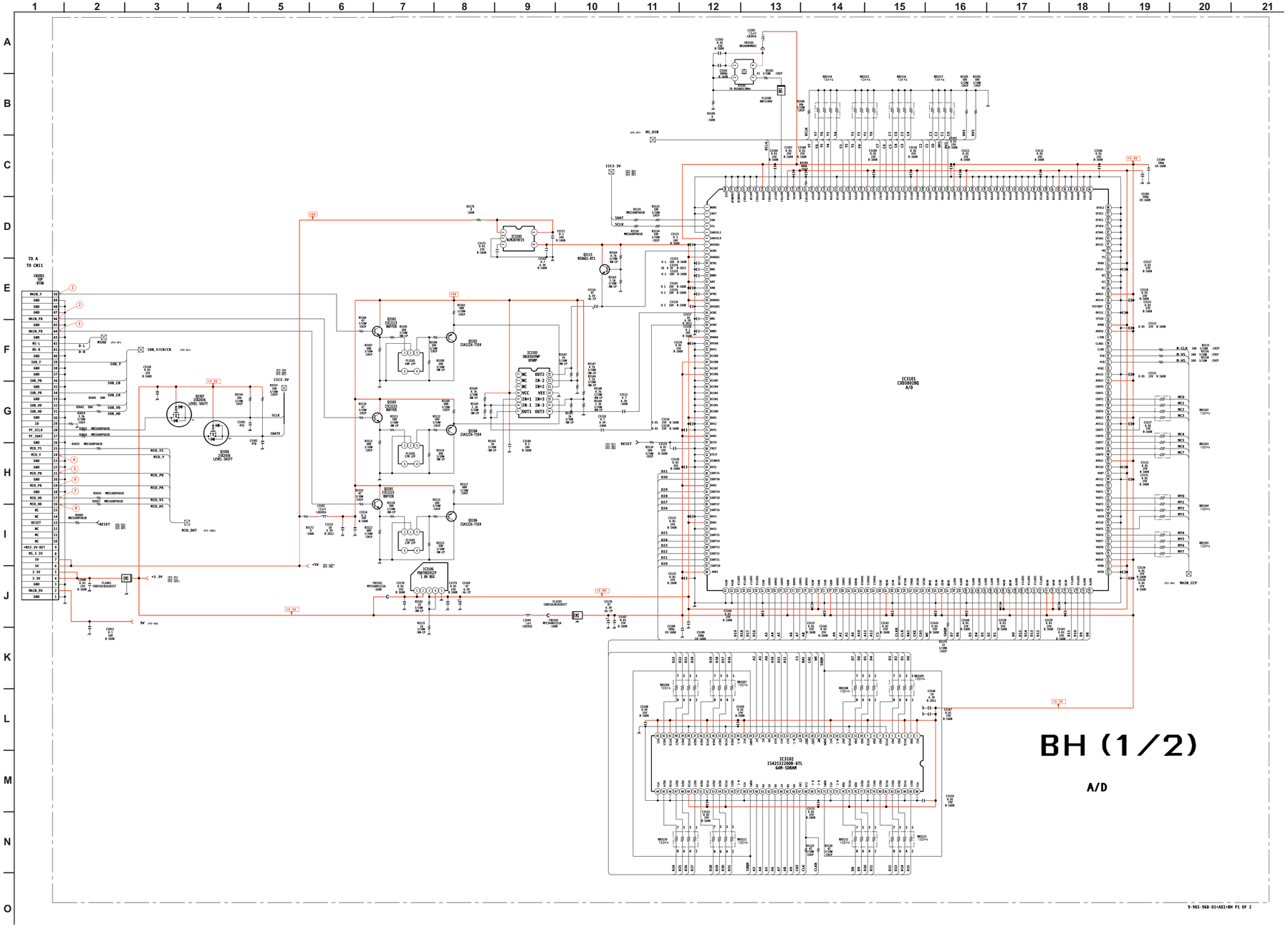
CONDUCTOR SIDE



NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BH BOARD SCHEMATIC DIAGRAM (1 OF 2)

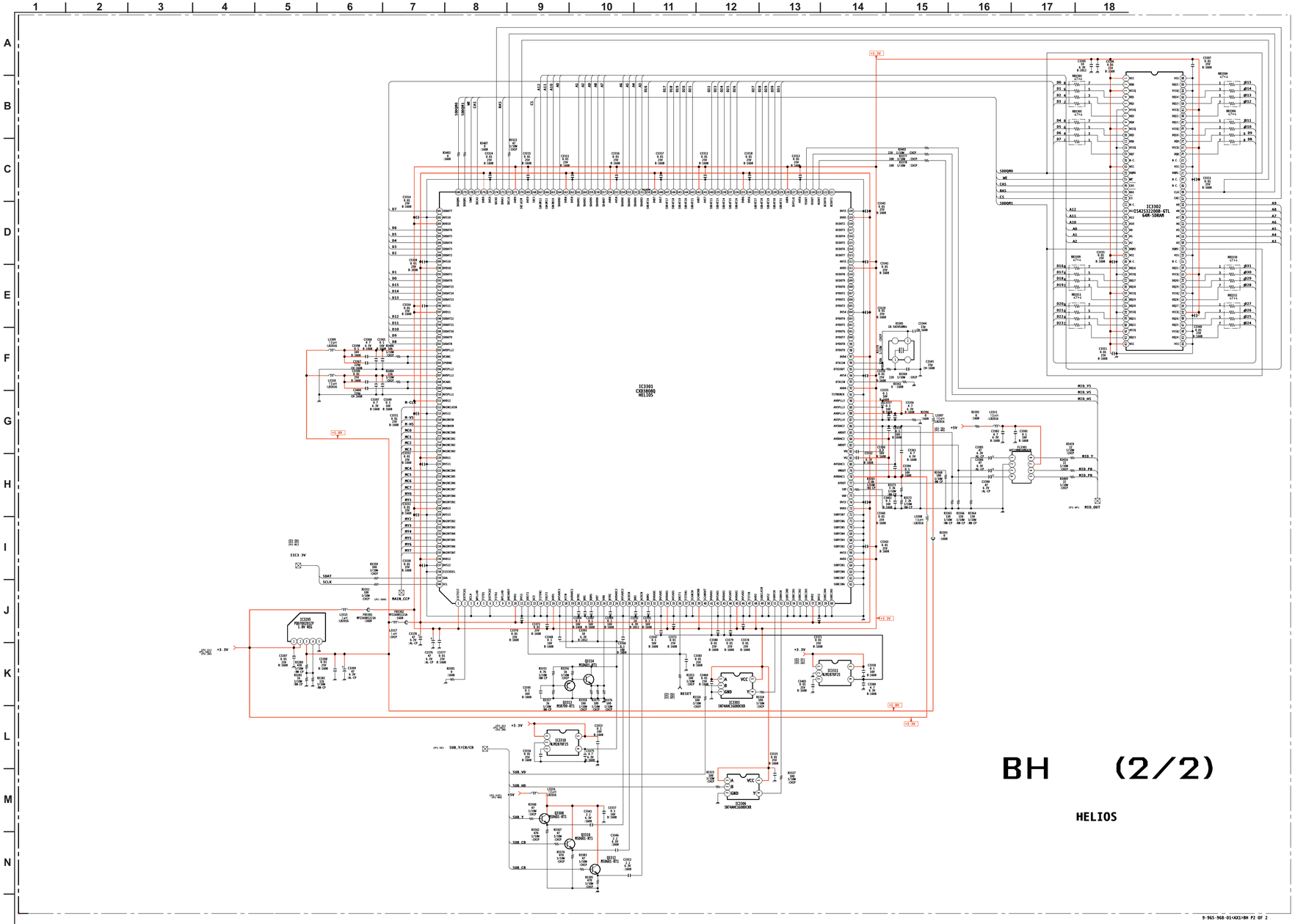
Due to the complexity of this board, performing component level field repairs is not recommended.
If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.



NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

BH BOARD SCHEMATIC DIAGRAM (2 OF 2)

Due to the complexity of this board, performing component level field repairs is not recommended.
If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.



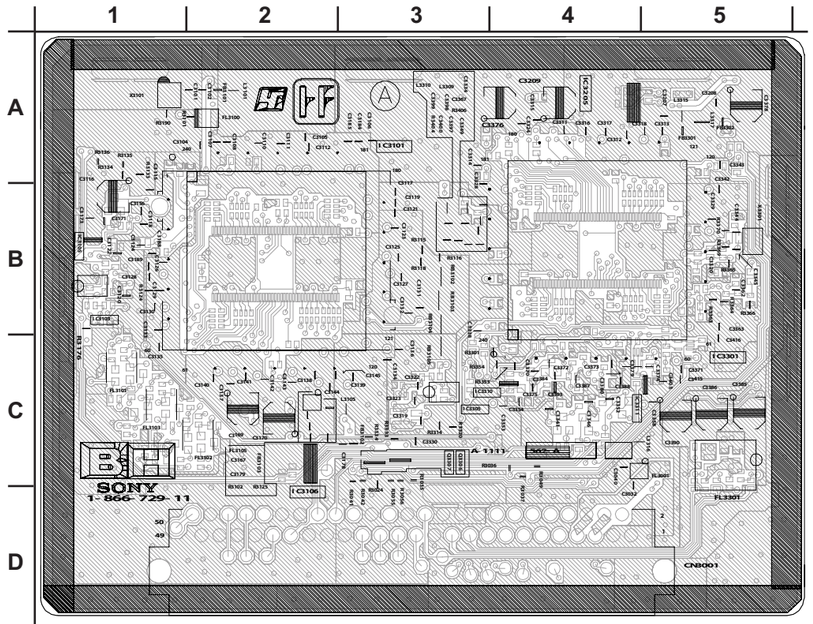
BH (2/2)

HELIOS

NOTE: THE BM AND BH BOARDS ARE INTERCHANGEABLE. EITHER BOARD CAN BE USED AS A REPLACEMENT.

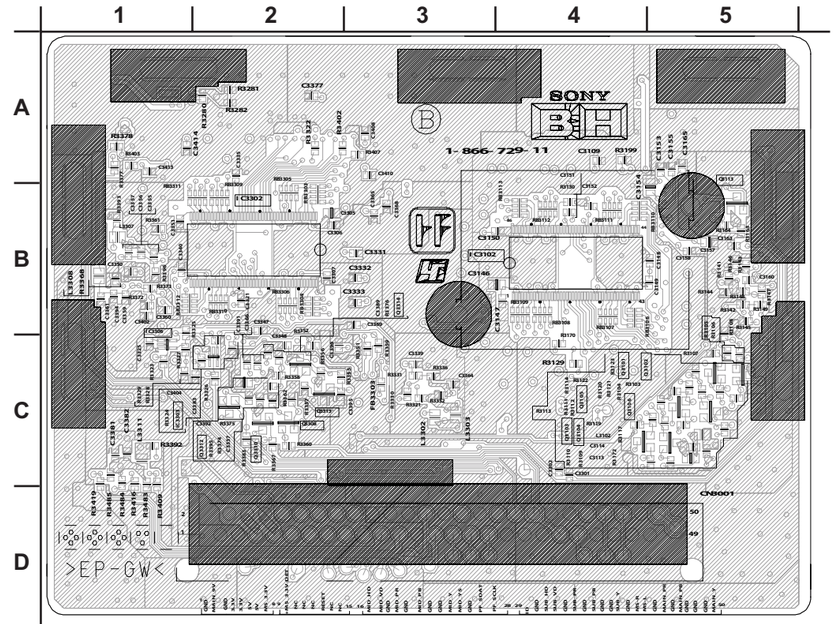
BH [A/D, HELIOS]

COMPONENT SIDE

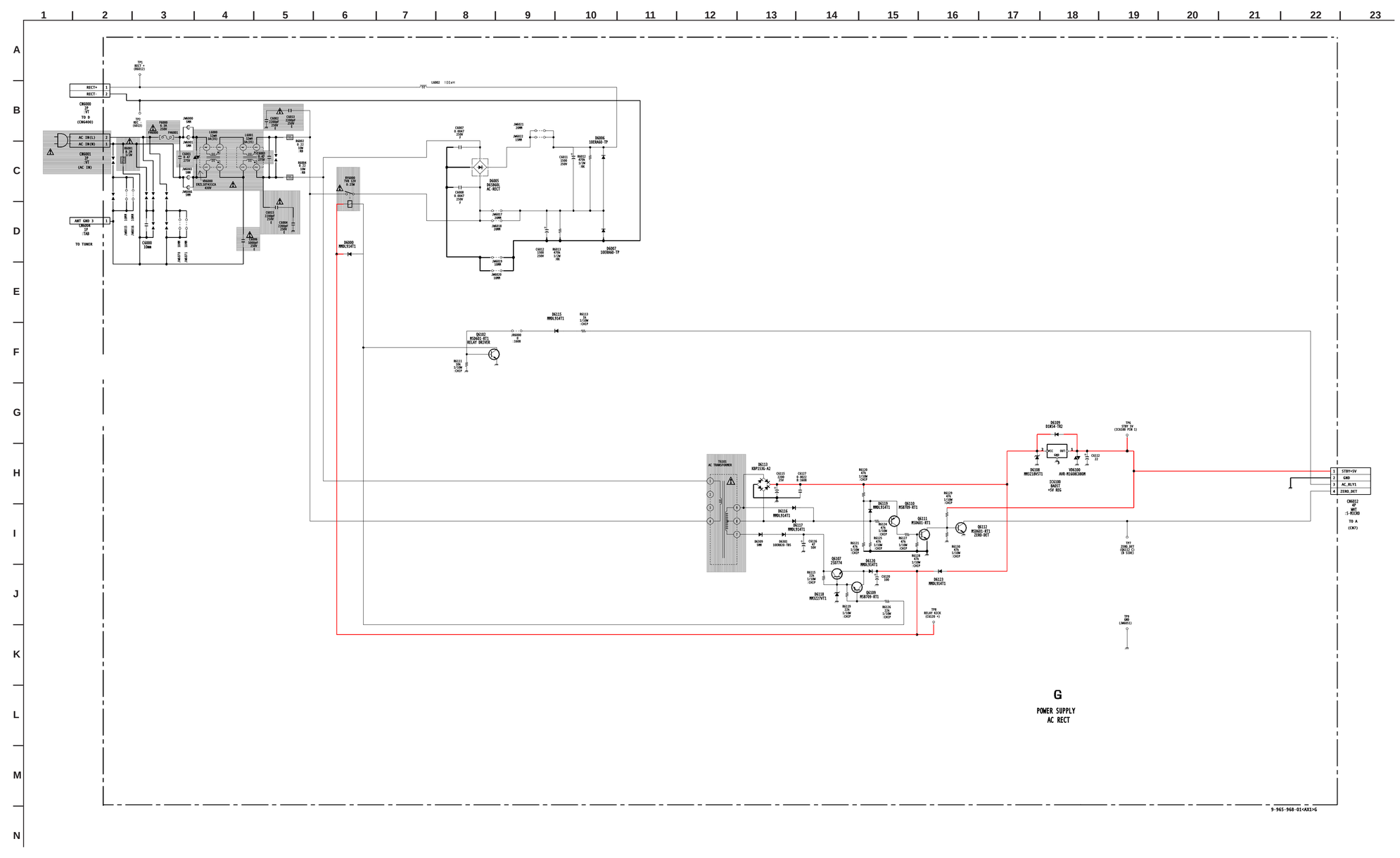


BH [A/D, HELIOS]

CONDUCTOR SIDE

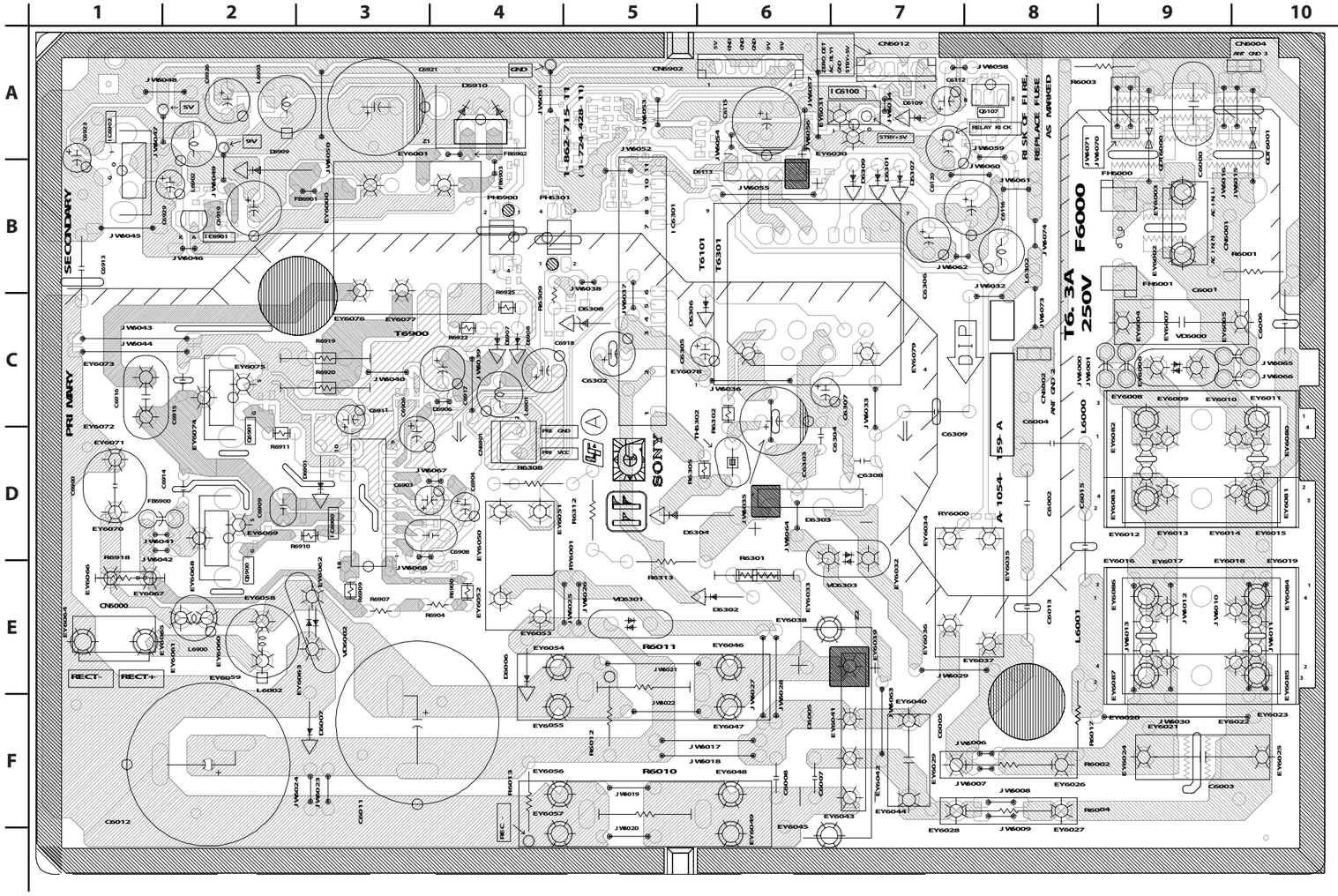


G BOARD SCHEMATIC DIAGRAM


G
POWER SUPPLY
AC RECT
9-965-948-01<AX1>G
CN6000 CP :VT TO D (CN6A0V)
CN6001 CP :VT (AC IN)
CN6002 CP :TAB TO TUNER
CN6012 AP MBT 5-951N0 TO A (CN7)
AC_IN(L)
AC_IN(N)
RECT+
RECT-
ANT GND 3
STBY+5V
GND
AC_RLY1
ZERO_DET
D6109 DIBC4-TR2
IC6100 BA05T +5V REG
V06200 AVR-M10A0J00R0
D6108 RN1218FXTL
D6113 KBP153G-A2
D6112 RSD02-8T1 2SD2-8ET
D6110 RSA709-RT1
D6111 RSD02-8T1
D6120 RSA709-RT1
D6130 RSA709-RT1
D6137 2SD714
D6138 RN3227VT1
D6139 RSA709-RT1
D6123 RNDL5S4T1
D6116 RNDL5S4T1
D6117 RNDL5S4T1
D6115 RNDL5S4T1
D6102 RSD02-8T1 RELAY SKIVER
D6000 RNDL5S4T1
D6005 DCS06DL AC RECT
D6006 10ERA60-TP
D6007 10ERA60-TP
TP1 RECT + (SH512)
TP2 RECT - (SH513)
TP6 STBY 5V (IC6100 PIN 1)
TP7 ZERO_DET (CN512 PIN 3)
TP8 RELAY KICK (CN120 *2)
TP9 GND (CN6A51)
T01001 AC TRANSFORMER
VR6000 ERZL10T431CA 430V
L6000 L6001 L6002 L6003 L6004
L6002 100uH
R6000 R6001 R6002 R6003 R6004 R6005 R6006 R6007 R6008 R6009 R6010 R6011 R6012 R6013 R6014 R6015 R6016 R6017 R6018 R6019 R6020 R6021 R6022 R6023 R6024 R6025 R6026 R6027 R6028 R6029 R6030 R6031 R6032 R6033 R6034 R6035 R6036 R6037 R6038 R6039

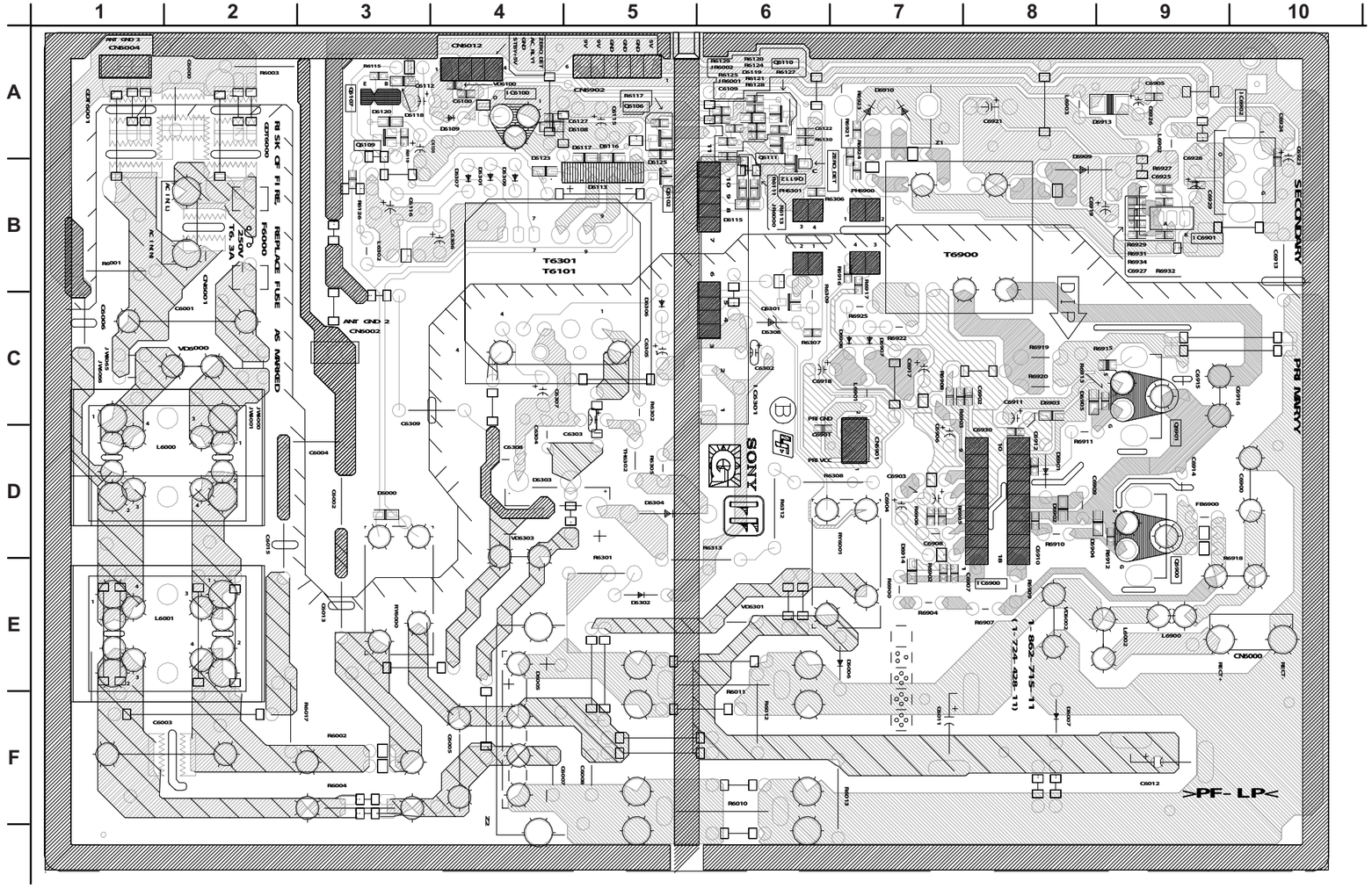
G [POWER SUPPLY, AC RECT]

COMPONENT SIDE

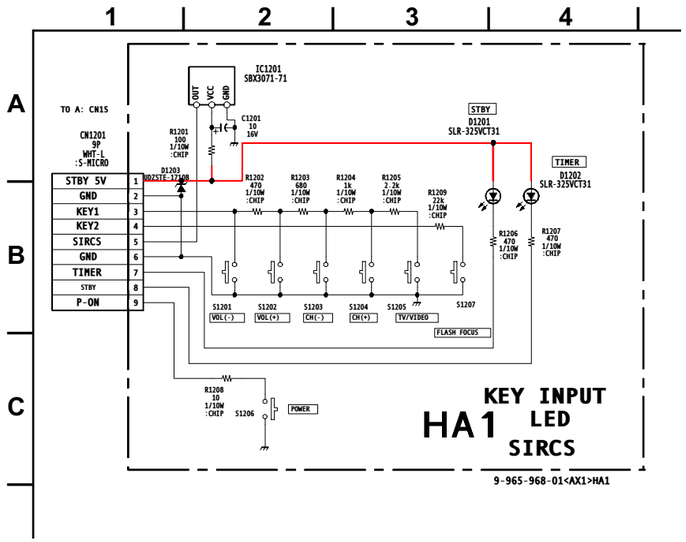


G [POWER SUPPLY, AC RECT]

CONDUCTOR SIDE

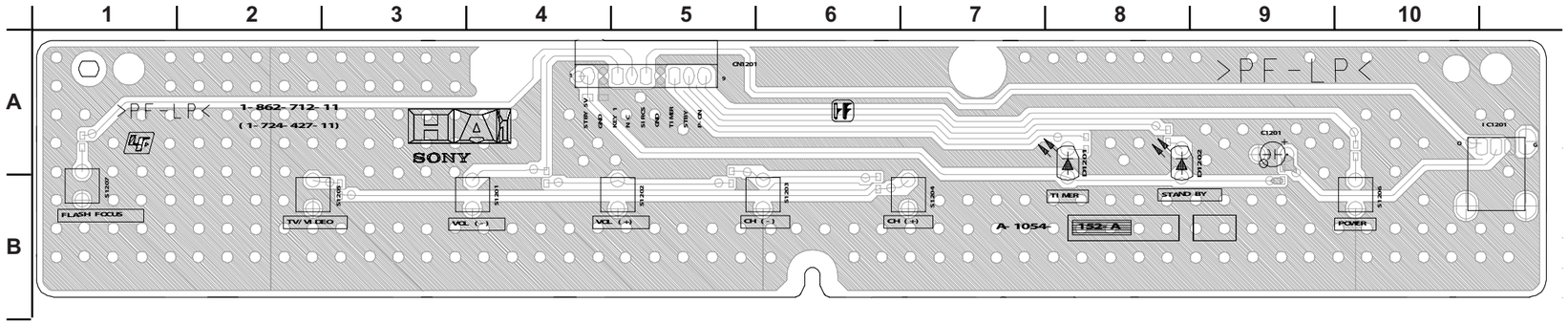


HA1 BOARD SCHEMATIC DIAGRAM



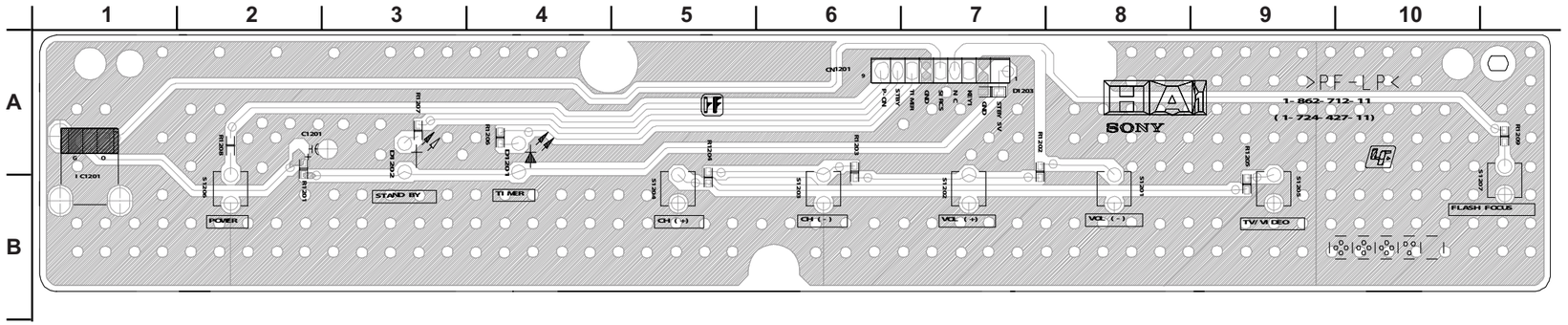
HA1 [KEY INPUT, LED, SIRCS]

COMPONENT SIDE



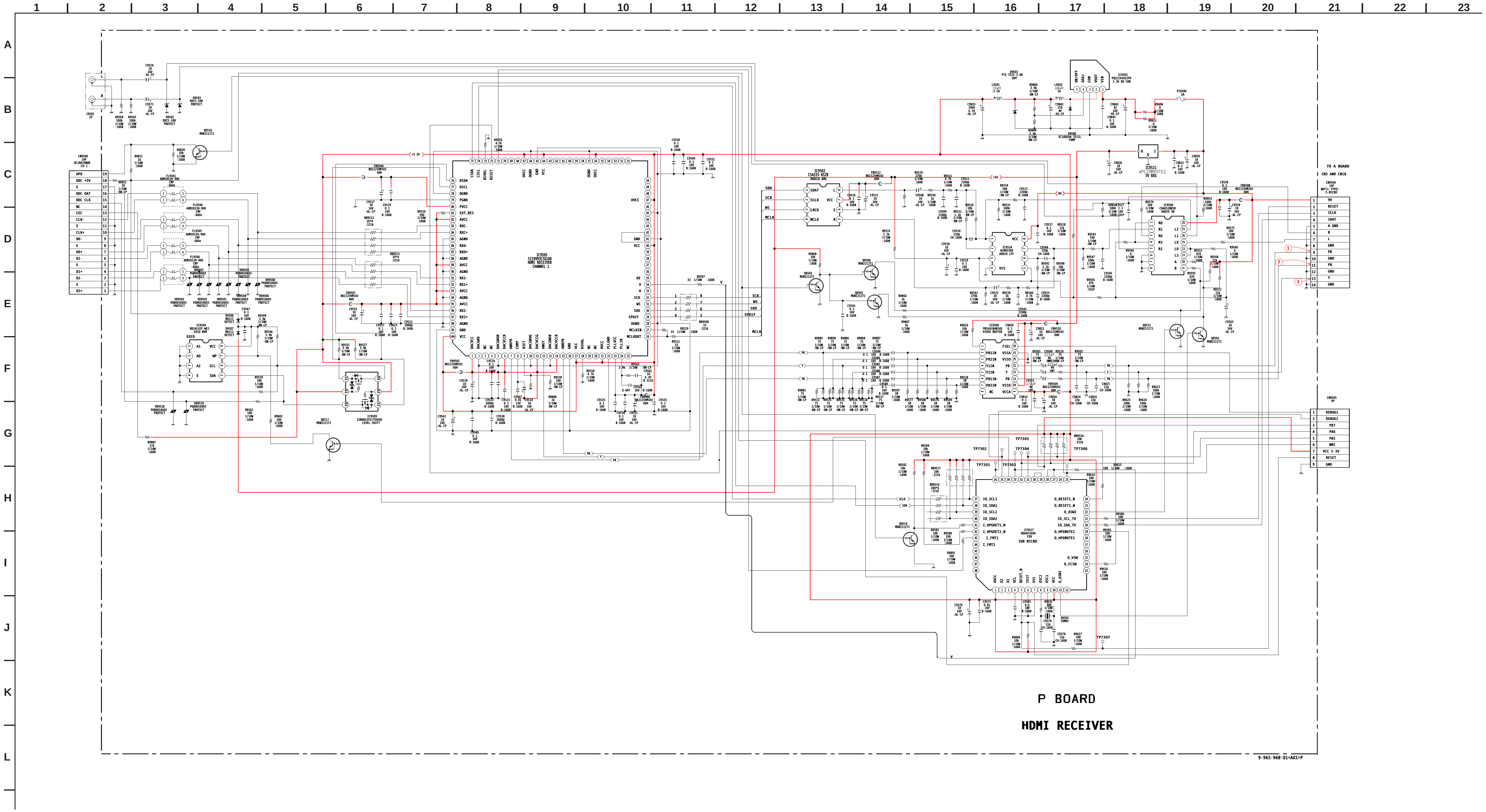
HA1 [KEY INPUT, LED, SIRCS]

CONDUCTOR SIDE



P BOARD SCHEMATIC DIAGRAM

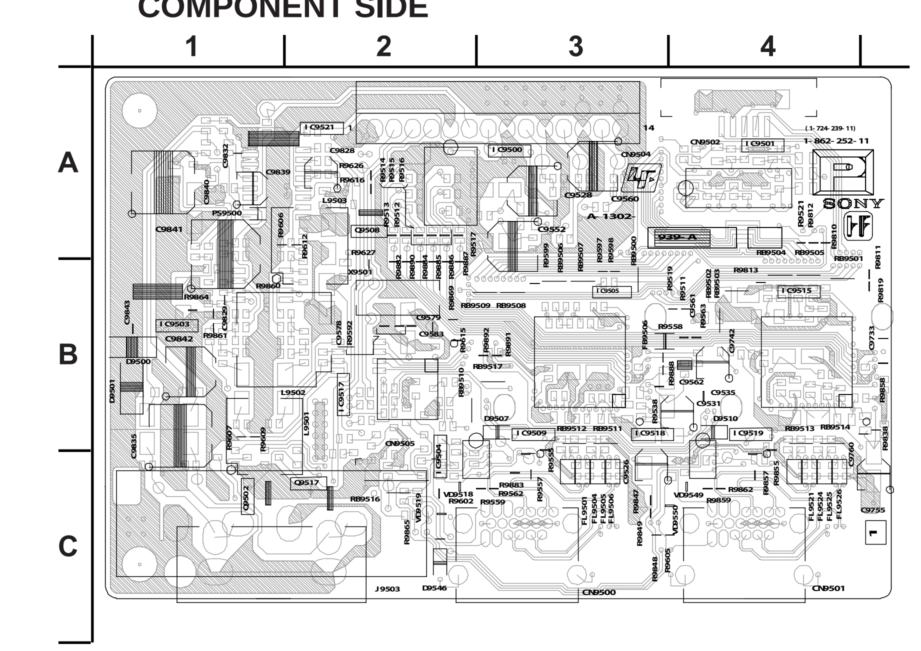
Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.


P BOARD
HDMI RECEIVER
IC9505 SII9993CTG100 HDMI RECEIVER CHANNEL 1
IC9502 CS4335-KSZR AUDIO DAC
IC9503 PQ1CZ41H2ZPH 3.3V DD CON
IC9521 PC29M05TE2 5V REG
IC9514 NJM4558E AUDIO LPF
IC9506 CD4052BNSR AUDIO SW
IC9500 FMS6418AM16X VIDEO BUFFER
IC9517 HD64F3694 FXV SUB MICRO
IC9504 BR24L02F-WE2 EDID NVM
IC9509 SSM6N15FU(TE85R) LEVEL-SHIFT
CN9500 19P DC1R019NDB :CH 1
CN9504 14P WHT(L TYPE) :S-MICRO
CN9505 9P
TO A BOARD CN3 AND CN18
9-965-968-01<AX1>P

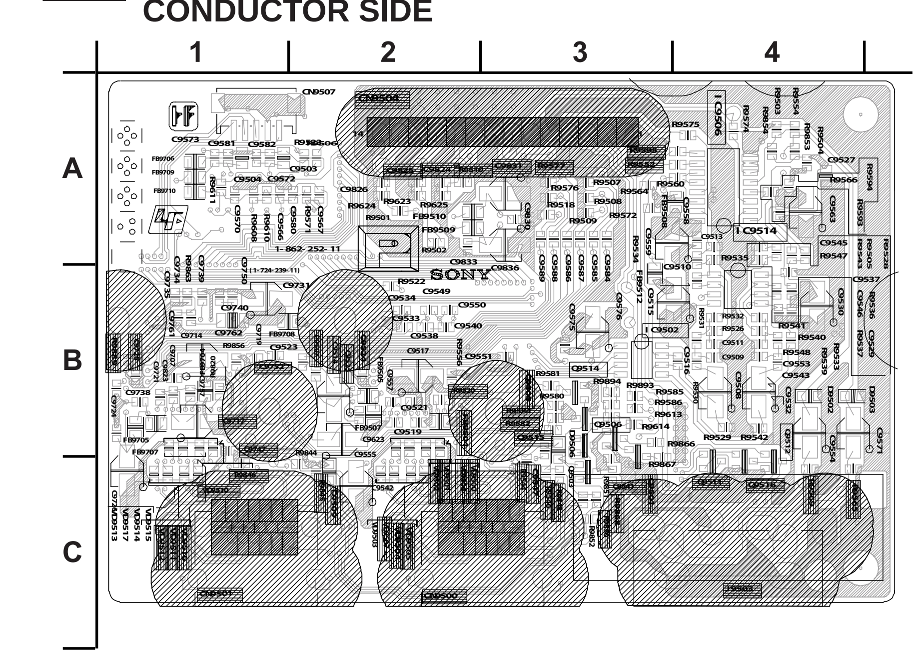
P BOARD WAVEFORMS

1	2	3
1.3 Vp-p (H)	1.3 Vp-p (H)	1.5 Vp-p (H)

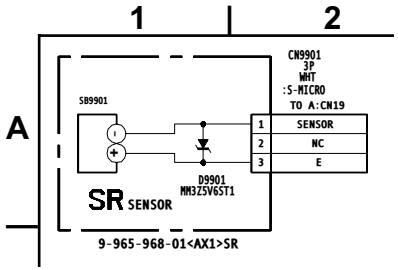
P [HDMI RECEIVER] COMPONENT SIDE



P [HDMI RECEIVER] CONDUCTOR SIDE



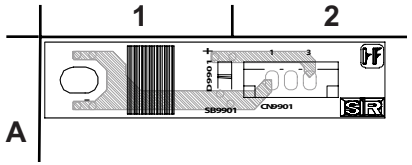
SR BOARD SCHEMATIC DIAGRAM



Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method. Data is provided for reference only.

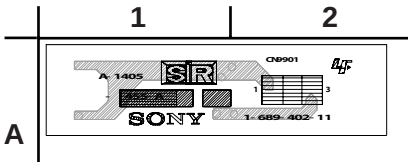
SR [SENSOR]

COMPONENT SIDE

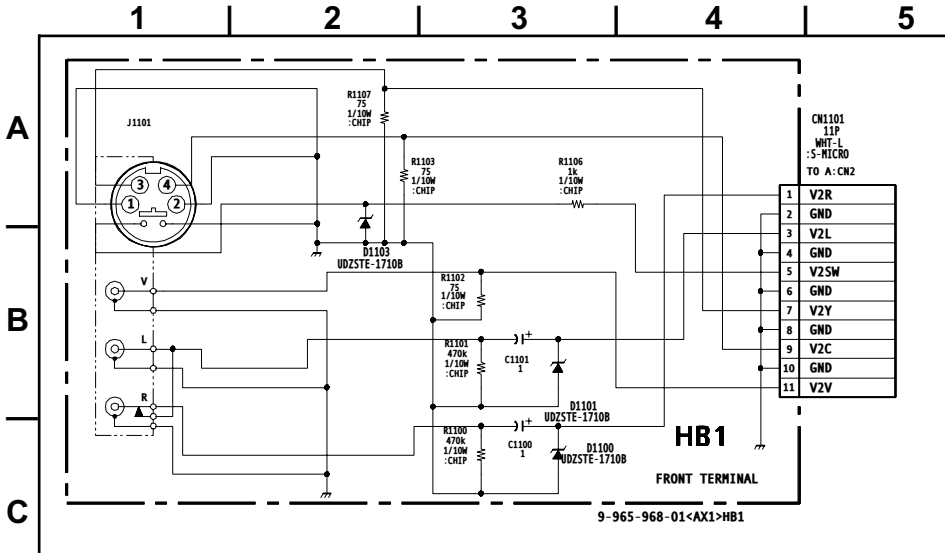


SR [SENSOR]

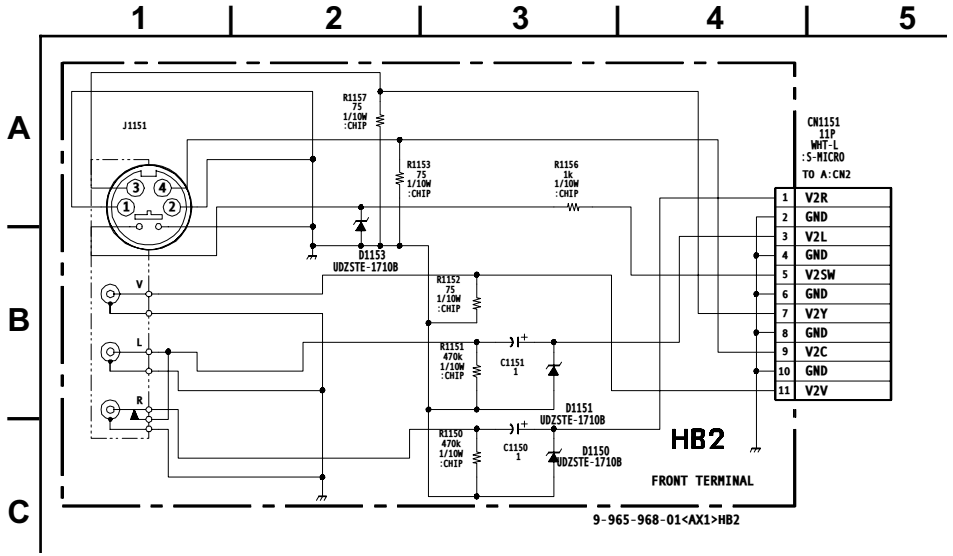
CONDUCTOR SIDE



HB1 BOARD SCHEMATIC DIAGRAM (KP-51WS520/57WS520 ONLY)



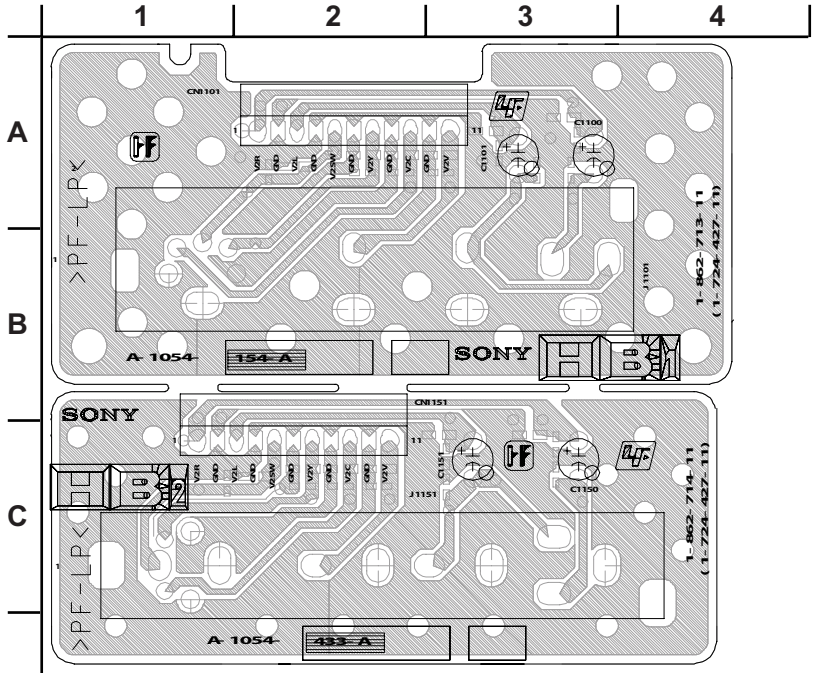
HB2 BOARD SCHEMATIC DIAGRAM (KP-46WT520 ONLY)



HB1 [FRONT TERMINAL] (KP-51WS520/57WS520 ONLY)

HB2 [FRONT TERMINAL] (KP-46WT520 ONLY)

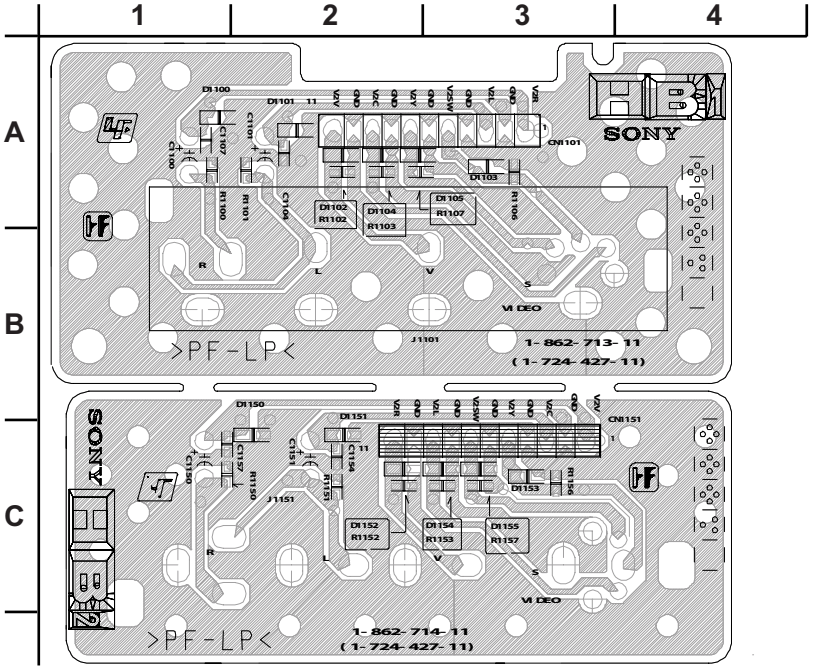
COMPONENT SIDE



HB1 [FRONT TERMINAL] (KP-51WS520/57WS520 ONLY)

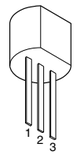
HB2 [FRONT TERMINAL] (KP-46WT520 ONLY)

CONDUCTOR SIDE

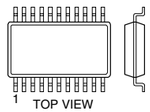


5-5. SEMICONDUCTORS

AN77L12-TA
NJM78L12A-T3
NJM79L05A
NJM79L05A-T3

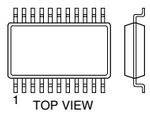


BA9759F-E2



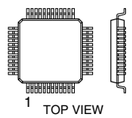
18pin SOP

CD0031AM



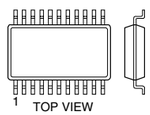
48pin SOP

CM0017AF



100pin QFP

CXA1726AM
CXA1726AM-T6



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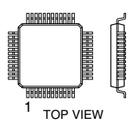

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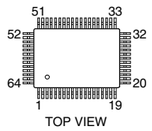

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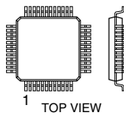

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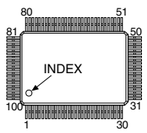
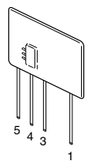


DM-58



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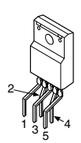

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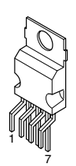

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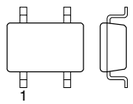

5pin CHIP

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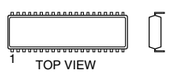

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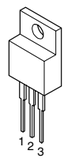

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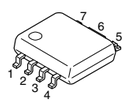

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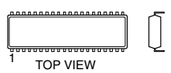

40pin DIP

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NJM2903M
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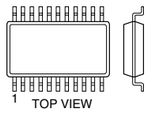

8pin SOP

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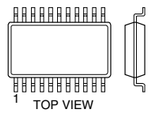

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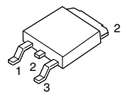

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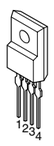

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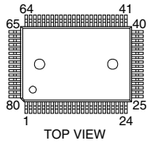

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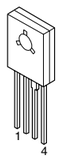

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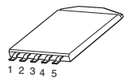

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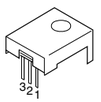

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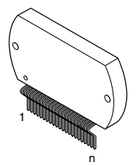

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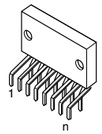

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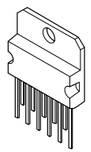

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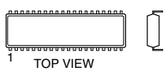

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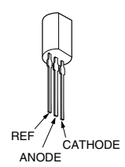

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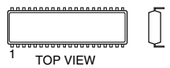

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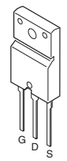

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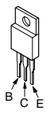

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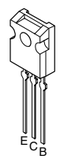

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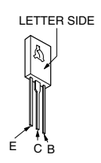

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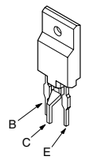

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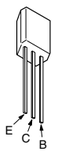

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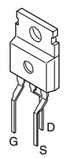

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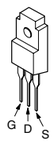

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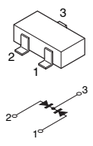

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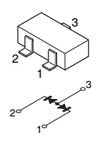

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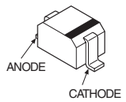

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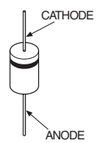

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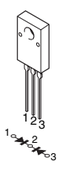

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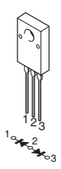

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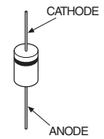

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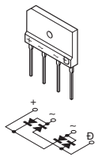

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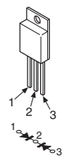

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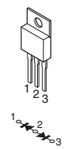

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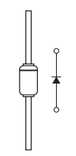

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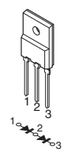

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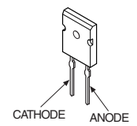
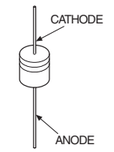
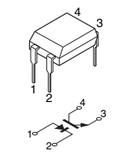


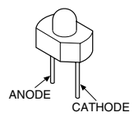
MTZJ-T-77-15B
MTZJ-T-77-20B
MTZJ-T-77-5.1B
RD15ES-B2
RD18ES-B2
RD20ES-B2
RD5.1ESB2
RD5.6ESB2
1SS133T-77



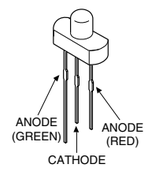
PC123F2
PC123FY2



SLR-325VCT31



SPR-325MVW



SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

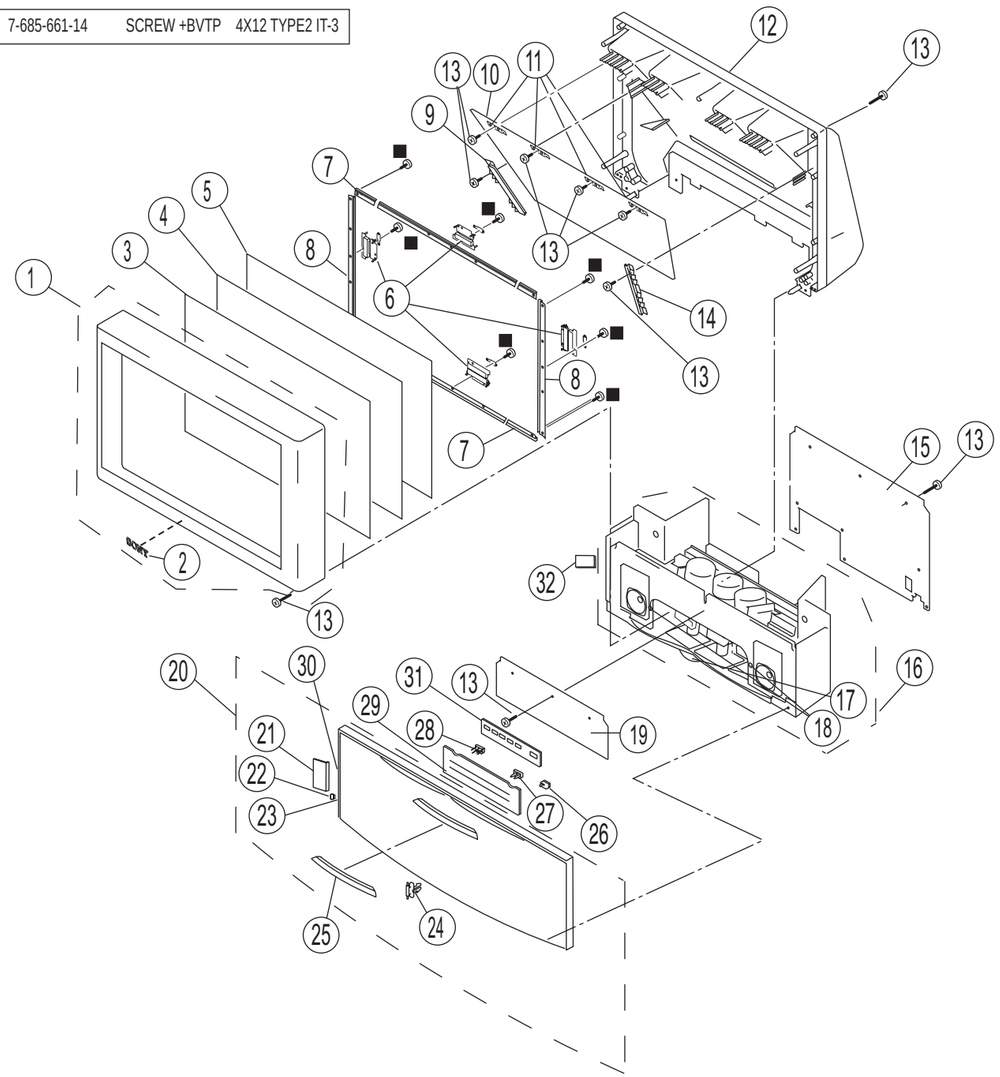
* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

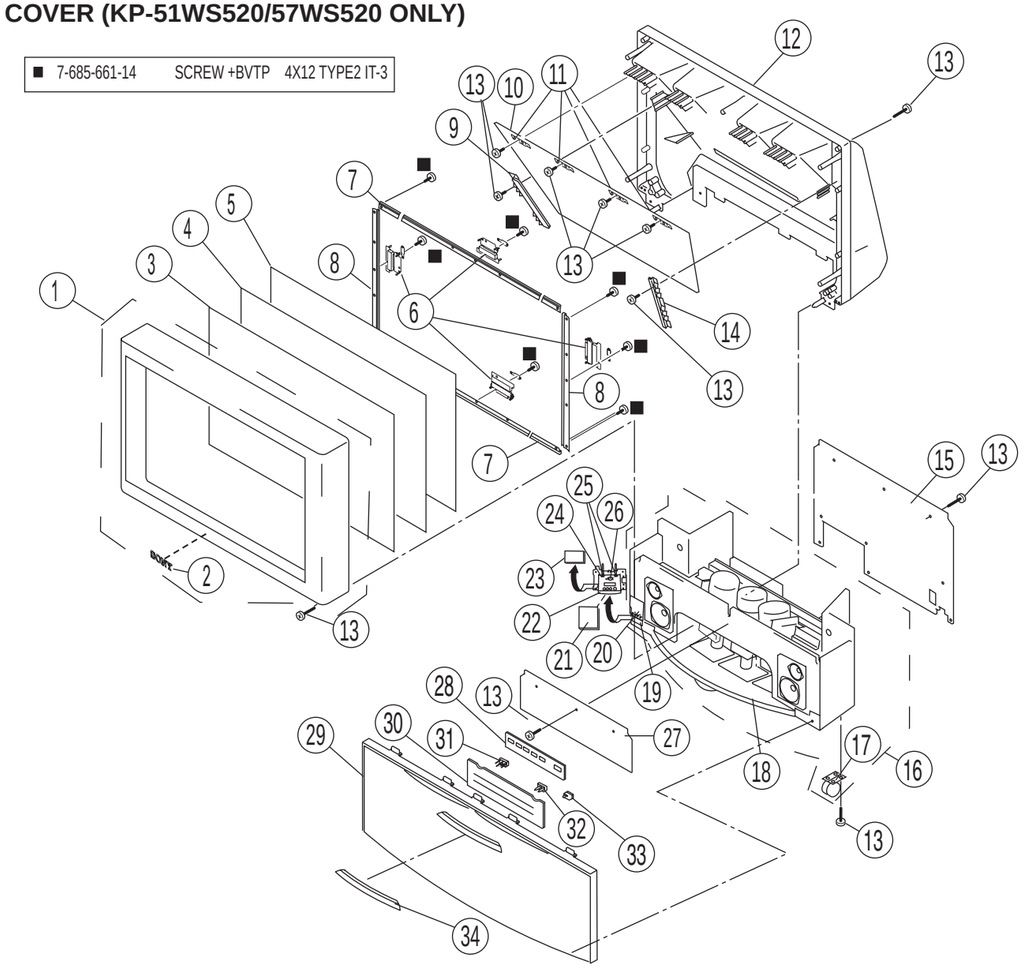
6-1. COVER (KP-46WT520 ONLY)

■ 7-685-661-14 SCREW +BVTP 4X12 TYPE2 IT-3



REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES
1	X-2021-272-1	BEZEL (46) ASSY	[2]
2	3-704-179-01	EMBLEM (NO.9), SONY	
3	4-090-943-11	SCREEN (46W), CONTRAST	
4	2-059-421-11	PLATE (46WL), DIFFUSION	
5	2-059-420-31	PLATE (46WF), DIFFUSION	
* 6	A-1405-083-A	SR BOARD, MOUNTED	
* 7	4-084-568-21	HOLDER, SCREEN	
* 8	4-084-568-31	HOLDER, SCREEN	
* 9	4-091-245-01	HOLDER (46L), MIRROR	
10	4-090-957-01	MIRROR (46)	
* 11	4-081-501-01	HOLDER, MIRROR	
* 12	4-090-956-11	COVER (46), MIRROR	
13	4-081-063-11	SCREW,DOME WASHER HEX TAP 4X20	
* 14	4-091-246-01	HOLDER (46R), MIRROR	
* 15	2-023-379-01	BOARD(46), REAR	
16	X-2021-174-1	CABINET(46) ASSY,BOTTOM	[17-18]
17	4-084-920-01	FOOT	
18	4-084-932-21	CATCH (S)	
* 19	2-023-378-02	BOARD(46), FRONT	
20	X-2021-274-1	GRILLE (46) ASSY, SPEAKER	[21-24]
21	2-023-212-11	DOOR, SIDE TERMINAL	
22	4-042-192-01	CATCHER, PUSH	
23	4-045-250-01	DAMPER	
24	3-703-035-11	SHAFT, LID	
25	2-023-098-01	PANEL (S), CONTROL	
26	2-023-102-01	GUIDE, IR	
27	2-023-101-01	GUIDE, LED	
28	2-023-096-01	BUTTON (M)	
29	2-023-100-01	BUTTON, CONTROL	
30	2-022-622-01	LABEL, SIDE INPUT TERMINAL	
* 31	A-1054-152-A	HA1 BOARD, MOUNTED	
* 32	A-1054-799-A	HB2 BOARD, MOUNTED	

6-2. COVER (KP-51WS520/57WS520 ONLY)



REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES
1	X-2021-273-1	BEZEL (51) ASSY	[2]
		(KP-51WS520 ONLY)	
1	X-2021-281-1	BEZNET (57) ASSY	[2]
		(KP-57WS520 ONLY)	
2	3-704-179-01	EMBLEM (NO.9), SONY	
		(KP-51WS520 ONLY)	
2	4-381-079-01	EMBLEM (NO.10), SONY	
		(KP-57WS520 ONLY)	
3	4-090-910-11	SCREEN (51), CONTRAST	
		(KP-51WS520 ONLY)	
3	4-090-881-11	SCREEN (57), CONTRAST	
		(KP-57WS520 ONLY)	
4	2-059-423-31	PLATE (51WL), DIFFUSION	
		(KP-51WS520 ONLY)	
4	2-059-426-11	PLATE (57WL), DIFFUSION	
		(KP-57WS520 ONLY)	
5	2-059-422-31	PLATE (51WFV), DIFFUSION	
		(KP-51WS520 ONLY)	
5	2-059-425-11	PLATE (57WF), DIFFUSION	
		(KP-57WS520 ONLY)	
* 6	A-1405-083-A	SR BOARD, MOUNTED	
* 7	4-084-617-02	HOLDER, SCREEN	
		(KP-51WS520 ONLY)	
* 7	4-084-568-02	HOLDER, SCREEN	
		(KP-57WS520 ONLY)	
* 8	4-084-617-12	HOLDER, SCREEN	
		(KP-51WS520 ONLY)	
* 8	4-084-568-12	HOLDER, SCREEN	
		(KP-57WS520 ONLY)	
* 9	2-023-093-01	HOLDER (L), MIRROR SIDE	
		(KP-51WS520 ONLY)	
* 9	4-083-462-01	HOLDER (L), MIRROR SIDE	
		(KP-57WS520 ONLY)	
* 10	2-023-094-01	MIRROR (51)	
		(KP-51WS520 ONLY)	
10	4-084-561-03	MIRROR (57)	
		(KP-57WS520 ONLY)	
* 11	4-081-501-01	HOLDER, MIRROR	
* 12	2-023-091-01	COVER (51), MIRROR	
		(KP-51WS520 ONLY)	
* 12	4-083-466-11	COVER (57), MIRROR	
		(KP-57WS520 ONLY)	
13	4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20	
		(KP-51WS520/57WS520 ONLY)	
* 14	2-023-092-01	HOLDER (R), MIRROR SIDE	
		(KP-51WS520 ONLY)	
* 14	4-083-461-01	HOLDER (R), MIRROR SIDE	
		(KP-57WS520 ONLY)	

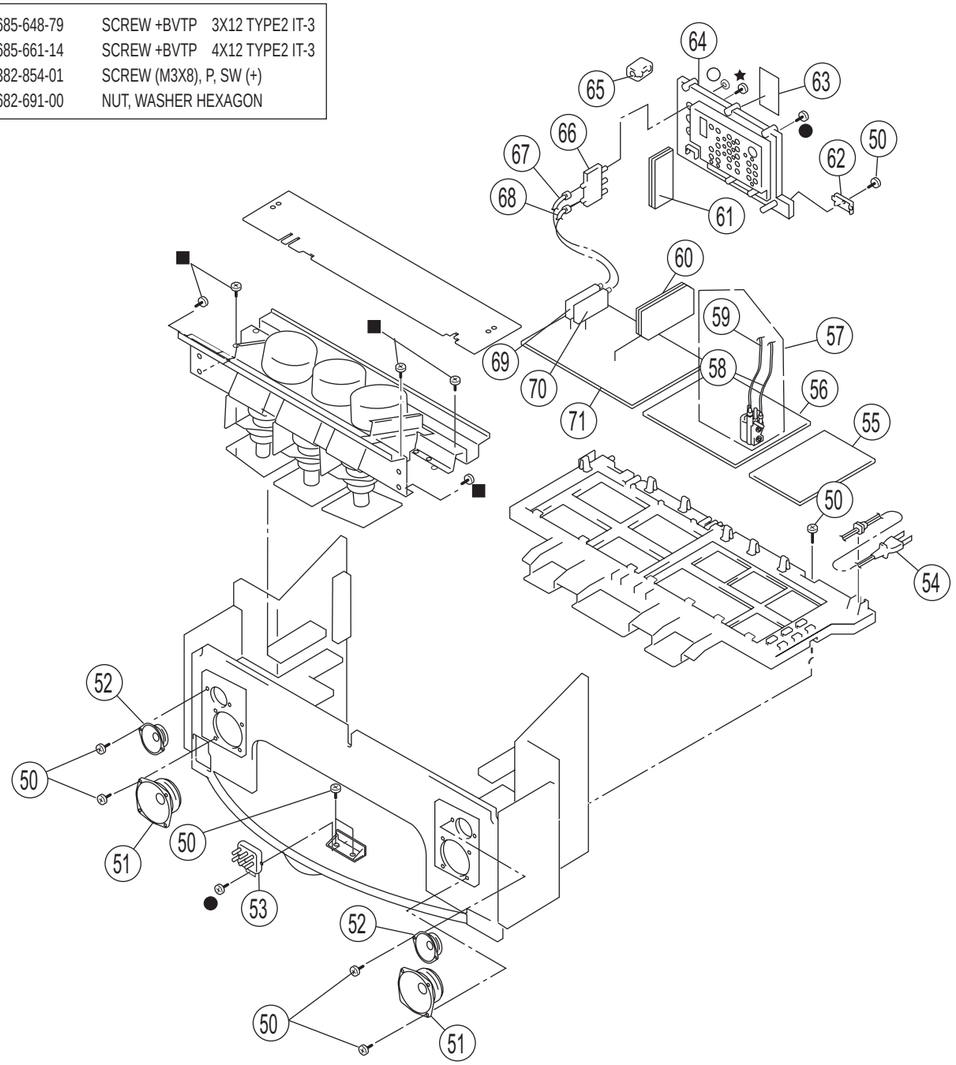
REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES
* 15	2-023-380-01	BOARD(51), REAR	
		(KP-51WS520 ONLY)	
* 15	2-022-468-01	BOARD (57), REAR	
		(KP-57WS520 ONLY)	
16	X-2021-270-1	CABINET(51)ASSY, BOTTOM	[17]
		(KP-51WS520 ONLY)	
16	X-2021-166-1	CABINET (57), ASSY	[17]
		(KP-57WS520 ONLY)	
17	4-040-755-01	CASTER (DIA. 30)	
		(KP-51WS520/57WS520 ONLY)	
18	2-023-069-01	SKIRT (51), FRONT	
		(KP-51WS520 ONLY)	
18	2-022-470-01	SKIRT (57), FRONT	
		(KP-57WS520 ONLY)	
19	4-088-572-01	LABEL, INPUT TERMINAL	
		(KP-51WS520/57WS520 ONLY)	
20	4-088-569-03	BRACKET, INPUT TERMINAL	
		(KP-51WS520/57WS520 ONLY)	
21	4-088-571-02	PLATE, INPUT TERMINAL	
		(KP-51WS520/57WS520 ONLY)	
22	3-973-975-41	DAMPER, OIL	
		(KP-51WS520/57WS520 ONLY)	
* 23	A-1054-154-A	HB1 BOARD, MOUNTED	
		(KP-51WS520/57WS520 ONLY)	
24	4-088-570-01	COVER, INPUT TERMINAL	
		(KP-51WS520/57WS520 ONLY)	
25	4-088-573-01	SPRING	
		(KP-51WS520/57WS520 ONLY)	
26	4-047-464-01	CATCHER, PUSH	
		(KP-51WS520/57WS520 ONLY)	
* 27	2-023-377-01	BOARD(51), FRONT	
		(KP-51WS520 ONLY)	
* 27	2-022-471-01	BOARD (57), FRONT	
		(KP-57WS520 ONLY)	
* 28	A-1054-152-A	HA1 BOARD, MOUNTED	
29	X-2021-275-1	GRILLE (51) ASSY, SPEAKER	
		(KP-51WS520 ONLY)	
29	X-2021-167-1	GRILLE (57) SPEAKER, ASSY	
		(KP-57WS520 ONLY)	
30	2-023-100-01	BUTTON, CONTROL	
31	2-023-096-01	BUTTON (M)	
32	2-023-102-01	GUIDE, IR	
33	2-023-101-01	GUIDE, LED	
34	2-023-098-01	PANEL (S), CONTROL	
		(KP-51WS520 ONLY)	
34	2-023-097-01	PANEL (L), CONTROL	
		(KP-57WS520 ONLY)	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-3. CHASSIS

●	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3
■	7-685-661-14	SCREW +BVTP 4X12 TYPE2 IT-3
★	4-382-854-01	SCREW (M3X8), P, SW (+)
○	3-682-691-00	NUT, WASHER HEXAGON



REF.NO.	PART NO.	DESCRIPTION	ASSEMBLY INCLUDES
50	4-081-063-11	SCREW,DOME WASHER HEX TAP 4X20 (KP-46WT520 ONLY)	
50	4-081-063-01	SCREW,DOME WASHER HEX TAP 4X20 (KP-51WS520/57WS520 ONLY)	
51	1-544-893-21	SPEAKER (10CM) (KP-46WT520 ONLY)	
51	1-825-525-11	LOUDSPEAKER (13CM) (KP-51WS520/57WS520 ONLY)	
52	1-529-403-41	LOUDSPEAKER (6.6CM) (KP-51WS520/57WS520 ONLY)	
⚠ 53	1-223-925-34	RESISTOR ASSY (HIGH-VOLTAGE)	
⚠ 54	1-827-159-11	CORD, AC POWER(WITH CONNECTOR) (KP-46WT520 ONLY)	
⚠ 54	1-790-001-12	CORD, AC POWER(WITH CONNECTOR) (KP-51WS520/57WS520 ONLY)	
* 55	A-1054-157-A	G BOARD, COMPLETE	
⚠ *56	A-1054-155-A	D BOARD, COMPLETE	
		The high-voltage leads associated with the FBT on the D board are not included and must be ordered separately. (See 58-60)	
⚠ 57	1-453-450-11	FBT ASSY NX-6030//M3A4	[58-60]
⚠ 58	1-779-095-51	LEAD ASSY, HIGH-VOLTAGE	
⚠ 59	1-900-260-40	CONNECTOR ASSY, MV	

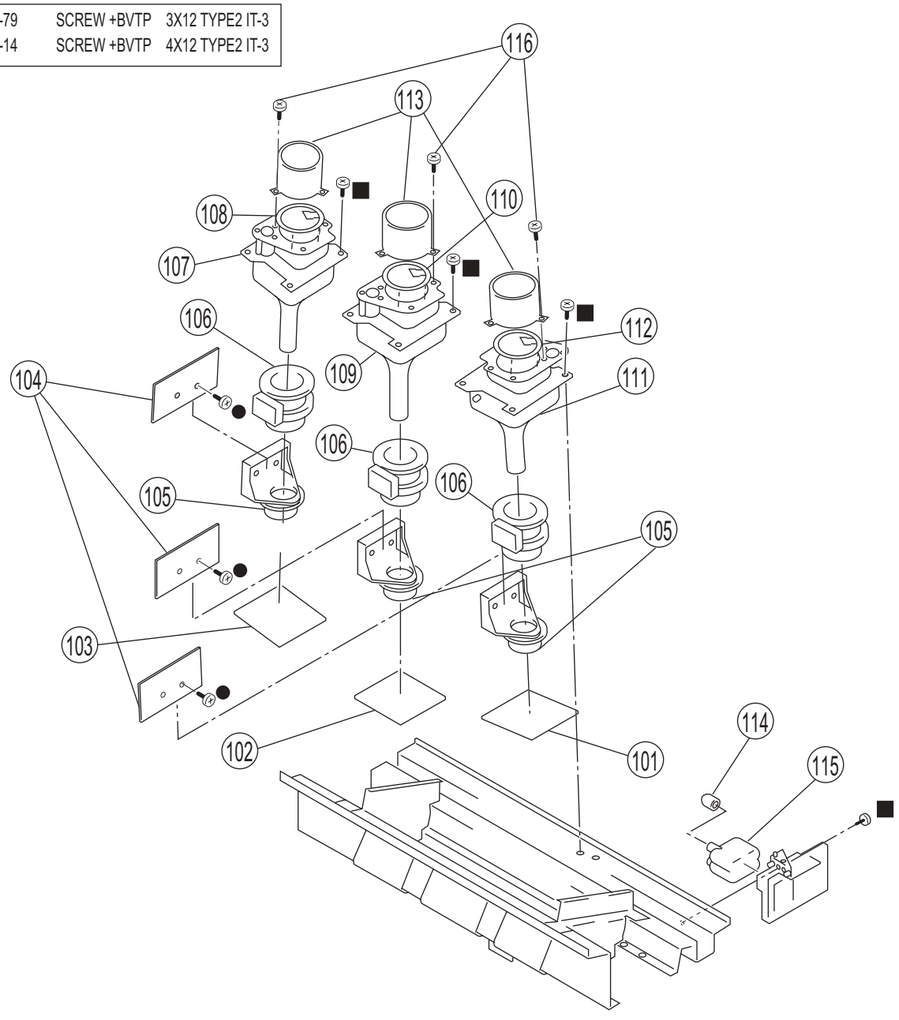
REF.NO.	PART NO.	DESCRIPTION
* 60	A-1063-104-A	BM BOARD, COMPLETE
* 60	(See 71)	BH BOARD, COMPLETE
	If the BH board needs to be replaced use an A Board part number to order the replacement kit.	
* 61	A-1068-754-A	P BOARD, COMPLETE
62	4-069-675-01	CAP, TERMINAL BOARD
63	2-023-279-02	LABEL, TERMINAL
64	2-023-282-01	BOARD, TERMINAL
65	1-500-497-11	FILTER, CLAMP (FERRITE CORE)
⚠ 66	1-771-787-21	SWITCH, RF ANTENNA
* 67	1-556-945-21	CABLE, P-P
* 68	1-557-056-31	CABLE, P-P
69	8-598-594-10	TUNER, FSS BTF-FA421
⚠ 70	8-598-593-20	TUNER, FSS BTF-WA421
* 71	A-1054-149-A	A BOARD, COMPLETE
* 71	A-1082-955-A	A BOARD, COMPLETE
	The A Boards are manufactured at different facilities. Either part can be used as a replacement.	

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

6-4. PICTURE TUBE

● 7-685-648-79	SCREW +BVTP	3X12 TYPE2 IT-3
■ 7-685-661-14	SCREW +BVTP	4X12 TYPE2 IT-3



REF.NO.	PART NO.	DESCRIPTION
* 101	A-1054-147-A	CB BOARD, MOUNTED
* 102	A-1054-148-A	CG BOARD, MOUNTED
* 103	A-1054-146-A	CR BOARD, MOUNTED
* 104	A-1405-662-A	VM BOARD, MOUNTED
⚠ 105	1-452-790-33	NECK ASSEMBLY (KP-46WT520/51WS520 ONLY)
⚠ 105	1-451-535-14	COIL ASSY, VM (KP-57WS520 ONLY)
⚠ 106	1-451-537-41	DEFLECTION YOKE (KP-46WT520/51WS520 ONLY)
⚠ 106	1-451-537-31	DEFLECTION YOKE (KP-57WS520 ONLY)
⚠ 107	8-735-184-05	CRT 07MRC21(R) 16LWP12RFA (KP-46WT520 ONLY)
⚠ 107	A-1107-619-A	COUPLER (R) ASSY, CRT (KP-46WT520 SERIAL # 8,500,001 AND UP ONLY)
⚠ 107	8-735-186-05	CRT 07MRC31(R) 16LWP13RFA (KP-51WS520 ONLY)
⚠ 107	A-1107-617-A	COUPLER R) ASSY, CRT (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
⚠ 107	A-1604-491-A	COUPLER (R) ASSY, CRT (KP-57WS520 ONLY)
108	4-096-118-02	SHADE (R) (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
108	4-088-542-02	SHADE (R) (KP-57WS520 ONLY)
⚠ 109	8-735-182-05	CRT 07MRC21(G) 16LWP12HAA (KP-46WT520/51WS520 ONLY)
⚠ 109	A-1107-615-A	COUPLER (G) ASSY, CRT (KP-46WT520/51WS520 SERIAL # 8,500,001 AND UP ONLY)
⚠ 109	A-1604-483-A	COUPLER (G) ASSY, CRT (KP-57WS520 ONLY)
110	4-096-119-02	SHADE (G) (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
110	4-101-291-02	SHADE (G) (KP-57WS520 ONLY)
⚠ 111	8-735-183-05	CRT 07MRC21(B) 16WP12BMB (KP-46WT520 ONLY)
⚠ 111	A-1107-618-A	COUPLER (B) ASSY, CRT (KP-46WT520 SERIAL # 8,500,001 AND UP ONLY)
⚠ 111	8-735-185-05	CRT 07MRC31(B) 16LWP13BMB (KP-51WS520 ONLY)
⚠ 111	A-1107-616-A	COUPLER (B) ASSY, CRT (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
⚠ 111	A-1604-493-A	COUPLER (B) ASSY, CRT (KP-57WS520 ONLY)
112	4-101-761-02	SHADE (B) (KP-46WT520/51WS520 ONLY)
112	2-590-896-01	SHADE (B) (KP-51WS520 SERIAL # 8,500,001 AND UP ONLY)
112	4-101-444-02	SHADE BLUE (KP-57WS520 ONLY)
113	4-083-751-01	LENS (DELTA 250) (KP-46WT520/51WS520 ONLY)
113	4-083-750-01	LENS (DELTA 260) (KP-57WS520 ONLY)
114	4-373-137-01	CAP (Z), RUBBER
⚠ 115	8-598-875-00	BLOCK ASSY, HIGH-VOLTAGE
116	7-685-663-71	SCREW +BVTP 4X16 TYPE2 IT-3

SECTION 7: ELECTRICAL PARTS LIST

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

The components in this manual identified by the following symbol: ⋈ indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation for each set.

Should replacement be required for one of these components, replace only with the value originally used.

*** Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.**

CR

RESISTORS
- **All resistors are in ohms**
- **F : nonflammable**
- **All variable and adjustable resistors have characteristic curve B, unless otherwise noted.**

When ordering parts by reference number, please include the board name.

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
CR						
*		**A-1054-146-A**	**CR BOARD, MOUNTED**			
		4-382-854-11	SCREW (M3X10), P, SW (+)			
		CAPACITOR				
	C9101	1-104-570-11	CERAMIC	0.001µF	10%	2KV
	C9102	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
	C9103	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9105	1-107-962-11	ELECT	22µF	20%	250V
	C9106	1-162-114-00	CERAMIC	4700pF		1KV
	C9107	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9108	1-126-935-11	ELECT	470µF	20%	16V
	C9110	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9111	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9112	1-126-933-11	ELECT	100µF	20%	16V
	C9114	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9115	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9117	1-164-156-11	CERAMIC CHIP	0.1µF		25V
		CONNECTOR				
*	CN9101	1-564-510-11	PLUG, CONNECTOR			7P
*	CN9102	1-564-507-11	PLUG, CONNECTOR			4P
*	CN9103	1-564-508-11	PLUG, CONNECTOR			5P
	CN9104	1-695-915-11	TAB (CONTACT)			
	CN9107	1-785-879-11	CONNECTOR, ONE TOUCH			
	CN9110	1-695-915-11	TAB (CONTACT)			
		DIODE				
	D9101	8-719-970-83	DIODE	HSS82-TJ		
	D9104	8-719-970-83	DIODE	HSS82-TJ		
	D9109	8-719-081-97	DIODE	MMDL914T1		

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
		FERRITE BEAD				
	FB9101	1-469-578-11	FERRITE	1.1µH		
		IC				
	IC9101	8-759-680-01	IC	TDA6120Q/N2/S1		
		JACK				
⚠	J9101	1-251-182-11	SOCKET, CRT			
		COIL				
	L9101	1-414-856-11	INDUCTOR	10µH		
	L9102	1-414-855-31	INDUCTOR	1µH		
	L9103	1-414-856-11	INDUCTOR	10µH		
		NEON LAMP				
⚠	NL9102	1-517-778-21	LAMP, NEON			
	NL9103	1-517-778-21	LAMP, NEON			
		TRANSISTOR				
	Q9101	8-729-010-25	TRANSISTOR	MSD601-RT1		
	Q9102	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
	Q9103	8-729-010-05	TRANSISTOR	MSB709-RT1		
	Q9104	8-729-010-05	TRANSISTOR	MSB709-RT1		
	Q9105	8-729-122-63	TRANSISTOR	2SA1226-E4		
		RESISTOR				
	R9101	1-260-133-11	CARBON	680K	5%	1/2W
	R9102	1-249-425-11	CARBON	4.7K	5%	1/4W
	R9103	1-216-809-11	METAL CHIP	100	5%	1/10W
	R9104	1-260-132-11	CARBON	560K	5%	1/2W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CR CB

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9105	1-218-851-11	METAL CHIP	1.5K	0.50%	1/10W
R9106	1-218-835-11	METAL CHIP	330	0.50%	1/10W
R9107	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9108	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R9109	1-218-845-11	METAL CHIP	820	0.50%	1/10W
R9110	1-249-393-11	CARBON	10	5%	1/4W
R9114	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R9115	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R9116	1-260-328-11	CARBON	1K	5%	1/2W
R9120	1-243-624-71	METAL OXIDE	33K	5%	3W
R9122	1-260-320-11	CARBON	220	5%	1/2W
R9126	1-218-903-11	METAL CHIP	220K	0.50%	1/10W
R9127	1-218-903-11	METAL CHIP	220K	0.50%	1/10W
R9129	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R9131	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R9132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9133	1-216-809-11	METAL CHIP	100	5%	1/10W
R9134	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9135	1-260-087-11	CARBON	100	5%	1/2W
R9136	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R9137	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R9147	1-216-864-11	SHORT CHIP			

SPARK GAP

SG9101	1-518-925-31	GAP, SPARK
SG9102	1-519-422-11	GAP, SPARK
SG9103	1-519-422-11	GAP, SPARK

CB

*	**A-1054-147-A**	**CB BOARD, MOUNTED**
	4-382-854-11	SCREW (M3X10), P, SW (+)

CAPACITOR

C5550	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9301	1-104-570-11	CERAMIC	0.001µF	10%	2KV
C9302	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9303	1-107-662-11	ELECT	22µF	20%	350V
C9304	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C9305	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C9306	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9307	1-126-935-11	ELECT	470µF	20%	16V
C9309	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9310	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9311	1-126-933-11	ELECT	100µF	20%	16V
C9312	1-162-114-00	CERAMIC	4700pF		1KV
C9313	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9314	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9315	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9316	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9318	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C9320	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V

CONNECTOR

*	CN9301	1-564-511-11	PLUG, CONNECTOR	8P
*	CN9302	1-564-510-11	PLUG, CONNECTOR	7P
*	CN9303	1-564-507-11	PLUG, CONNECTOR	4P
	CN9304	1-695-915-11	TAB (CONTACT)	
*	CN9305	1-580-689-11	PIN, CONNECTOR (PC BOARD)	4P
	CN9308	1-785-879-11	CONNECTOR, ONE TOUCH	
*	CN9309	1-564-507-11	PLUG, CONNECTOR	4P
	CN9310	1-695-915-11	TAB (CONTACT)	

DIODE

D5520	8-719-072-66	DIODE	PDZ11B-115
D9301	8-719-081-97	DIODE	MMDL914T1
D9302	8-719-970-83	DIODE	HSS82-TJ
D9303	8-719-081-97	DIODE	MMDL914T1
D9305	6-500-029-01	DIODE	MM3Z12VST1
D9309	8-719-970-83	DIODE	HSS82-TJ

FERRITE BEAD

FB5206	1-469-578-11	FERRITE	1.1µH
FB9301	1-469-578-11	FERRITE	1.1µH

IC

IC9301	8-759-680-01	IC	TDA6120Q/N2/S1

JACK

⚠	J9301	1-251-182-11	SOCKET, CRT

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CB CG

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	COIL				
L9301	1-414-856-11	INDUCTOR	10µH		
L9302	1-414-855-31	INDUCTOR	1µH		
L9303	1-414-856-11	INDUCTOR	10µH		
	NEON LAMP				
⚠ NL9302	1-517-778-21	LAMP, NEON			
NL9303	1-517-778-21	LAMP, NEON			
	TRANSISTOR				
Q5520	6-550-659-01	TRANSISTOR	2SC4634LS-YB11		
Q5523	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q9301	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9302	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
Q9304	8-729-010-25	TRANSISTOR	MSD601-RT1		
Q9305	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9306	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9307	8-729-010-05	TRANSISTOR	MSB709-RT1		
Q9309	8-729-122-63	TRANSISTOR	2SA1226-E4		
Q9311	8-729-010-25	TRANSISTOR	MSD601-RT1		
	RESISTOR				
R5574	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5575	1-260-131-11	CARBON	470K	5%	1/2W
R5576	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5577	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5578	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R5580	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9301	1-216-809-11	METAL CHIP	100	5%	1/10W
R9302	1-216-864-11	SHORT CHIP			
R9303	1-260-133-11	CARBON	680K	5%	1/2W
R9304	1-260-132-11	CARBON	560K	5%	1/2W
R9306	1-218-831-11	METAL CHIP	220	0.50%	1/10W
R9307	1-218-851-11	METAL CHIP	1.5K	0.50%	1/10W
R9308	1-218-839-11	METAL CHIP	470	0.50%	1/10W
R9309	1-218-849-11	METAL CHIP	1.2K	0.50%	1/10W
R9313	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R9314	1-218-862-11	METAL CHIP	4.3K	0.50%	1/10W
R9315	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R9316	1-218-853-11	METAL CHIP	1.8K	0.50%	1/10W
R9317	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R9318	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9319	1-249-425-11	CARBON	4.7K	5%	1/4W
R9320	1-243-624-71	METAL OXIDE	33K	5%	3W
R9323	1-260-328-11	CARBON	1K	5%	1/2W
R9325	1-260-320-11	CARBON	220	5%	1/2W
R9327	1-218-901-11	METAL CHIP	180K	0.50%	1/10W
R9328	1-218-907-11	METAL CHIP	330K	0.50%	1/10W
R9330	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R9332	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R9333	1-218-854-11	METAL CHIP	2K	0.50%	1/10W
R9334	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R9335	1-249-393-11	CARBON	10	5%	1/4W
R9339	1-260-087-11	CARBON	100	5%	1/2W
R9340	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R9342	1-216-834-11	METAL CHIP	12K	5%	1/10W
R9343	1-216-832-11	METAL CHIP	8.2K	5%	1/10W
R9344	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9345	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R9346	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9347	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9348	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9349	1-216-809-11	METAL CHIP	100	5%	1/10W
R9350	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R9351	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R9352	1-216-864-11	SHORT CHIP			
R9355	1-216-809-11	METAL CHIP	100	5%	1/10W
R9356	1-216-809-11	METAL CHIP	100	5%	1/10W
	SPARK GAP				
SG9301	1-518-925-31	GAP, SPARK			
SG9302	1-519-422-11	GAP, SPARK			
SG9303	1-519-422-11	GAP, SPARK			

CG

*	**A-1054-148-A**	**CG BOARD, MOUNTED**	
	4-382-854-11	SCREW (M3X10), P, SW (+)	
	CAPACITOR		
C9201	1-107-662-11	ELECT	22µF 20% 350V
C9202	1-104-570-11	CERAMIC	0.001µF 10% 2KV
C9203	1-164-156-11	CERAMIC CHIP	0.1µF 25V
C9204	1-126-935-11	ELECT	470µF 20% 16V

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CG

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C9205	1-164-378-11	CERAMIC CHIP	30pF	5%	50V
	C9207	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9208	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C9209	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9211	1-126-933-11	ELECT	100µF	20%	16V
	C9213	1-162-114-00	CERAMIC	4700pF		1KV
	C9214	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9216	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
	C9217	1-164-156-11	CERAMIC CHIP	0.1µF		25V
		CONNECTOR				
*	CN9201	1-564-510-11	PLUG, CONNECTOR			7P
*	CN9202	1-564-510-11	PLUG, CONNECTOR			7P
*	CN9203	1-564-507-11	PLUG, CONNECTOR			4P
*	CN9204	1-564-507-11	PLUG, CONNECTOR			4P
*	CN9205	1-564-506-11	PLUG, CONNECTOR			3P
	CN9208	1-695-915-11	TAB (CONTACT)			
	CN9209	1-785-879-11	CONNECTOR, ONE TOUCH			
	CN9210	1-695-915-11	TAB (CONTACT)			
		DIODE				
	D9201	8-719-970-83	DIODE	HSS82-TJ		
	D9206	8-719-970-83	DIODE	HSS82-TJ		
	D9209	8-719-081-97	DIODE	MMDL914T1		
		FERRITE BEAD				
	FB9201	1-469-578-11	FERRITE	1.1µH		
		IC				
	IC9201	8-759-680-01	IC	TDA6120Q/N2/S1		
		JACK				
⚠	J9201	1-251-182-11	SOCKET, CRT			
		COIL				
	L9201	1-414-856-11	INDUCTOR	10µH		
	L9202	1-414-855-31	INDUCTOR	1µH		
	L9203	1-414-856-11	INDUCTOR	10µH		

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
		NEON LAMP				
⚠	NL9202	1-517-778-21	LAMP, NEON			
	NL9203	1-517-778-21	LAMP, NEON			
		TRANSISTOR				
	Q9201	8-729-010-25	TRANSISTOR	MSD601-RT1		
	Q9202	8-729-028-28	TRANSISTOR	2SK2036(TE85L)		
	Q9203	8-729-010-05	TRANSISTOR	MSB709-RT1		
	Q9204	8-729-122-63	TRANSISTOR	2SA1226-E4		
		RESISTOR				
	R9201	1-260-133-11	CARBON	680K	5%	1/2W
	R9202	1-260-132-11	CARBON	560K	5%	1/2W
	R9203	1-249-425-11	CARBON	4.7K	5%	1/4W
	R9204	1-216-809-11	METAL CHIP	100	5%	1/10W
	R9205	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
	R9206	1-218-832-11	METAL CHIP	240	0.50%	1/10W
	R9207	1-218-849-11	METAL CHIP	1.2K	0.50%	1/10W
	R9208	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R9209	1-218-845-11	METAL CHIP	820	0.50%	1/10W
	R9211	1-249-393-11	CARBON	10	5%	1/4W
	R9216	1-218-854-11	METAL CHIP	2K	0.50%	1/10W
	R9217	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9220	1-243-624-71	METAL OXIDE	33K	5%	3W
	R9221	1-260-328-11	CARBON	1K	5%	1/2W
	R9223	1-260-320-11	CARBON	220	5%	1/2W
	R9225	1-218-899-11	METAL CHIP	150K	0.50%	1/16W
	R9226	1-218-899-11	METAL CHIP	150K	0.50%	1/16W
	R9228	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
	R9230	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
	R9231	1-260-087-11	CARBON	100	5%	1/2W
	R9232	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
	R9233	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
		SPARK GAP				
	SG9201	1-518-925-31	GAP, SPARK			
	SG9202	1-519-422-11	GAP, SPARK			
	SG9203	1-519-422-11	GAP, SPARK			

VM

REF. NO.	PART NO.	DESCRIPTION	VALUES		
VM					
*	**A-1405-662-A**	**VM BOARD, MOUNTED**			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		CAPACITOR			
	C9001	1-126-933-11	ELECT	100µF	20% 16V
	C9002	1-164-156-11	CERAMIC CHIP	0.1µF	25V
	C9003	1-162-964-11	CERAMIC CHIP	0.001µF	10% 50V
	C9004	1-107-645-11	ELECT	22µF	20% 200V
	C9006	1-162-114-00	CERAMIC	4700pF	1KV
	C9007	1-164-156-11	CERAMIC CHIP	0.1µF	25V
	C9008	1-126-964-11	ELECT	10µF	20% 50V
	C9009	1-107-636-11	ELECT	10µF	20% 160V
	C9010	1-137-528-11	MYLAR	0.1µF	10% 250V
	C9011	1-107-826-11	CERAMIC CHIP	0.1µF	10% 16V
	C9012	1-137-528-11	MYLAR	0.1µF	10% 250V
	C9013	1-164-156-11	CERAMIC CHIP	0.1µF	25V
	C9014	1-117-450-11	MYLAR	0.47µF	10% 250V
		CONNECTOR			
*	CN9001	1-564-508-11	PLUG, CONNECTOR		5P
*	CN9002	1-564-506-11	PLUG, CONNECTOR		3P
*	CN9003	1-770-723-11	CONNECTOR, BOARD TO BOARD		8P
		FERRITE BEAD			
	FB9001	1-469-869-21	FERRITE	0µH	
	FB9002	1-469-869-21	FERRITE	0µH	
		CHIP CONDUCTOR			
	JR9001	1-216-864-11	SHORT CHIP		
	JR9002	1-216-864-11	SHORT CHIP		
		TRANSISTOR			
	Q9001	8-729-422-27	TRANSISTOR	2SD601A-Q	
	Q9002	8-729-422-27	TRANSISTOR	2SD601A-Q	
	Q9003	8-729-422-27	TRANSISTOR	2SD601A-Q	
	Q9004	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	
	Q9005	8-729-422-27	TRANSISTOR	2SD601A-Q	
	Q9006	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	
	Q9007	8-729-422-27	TRANSISTOR	2SD601A-Q	
	Q9008	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	
	Q9009	8-729-422-27	TRANSISTOR	2SD601A-Q	
	Q9010	8-729-424-02	TRANSISTOR	2SB709A-QRS-TX	
	Q9011	8-729-045-05	TRANSISTOR	2SA2005	
	Q9012	8-729-045-04	TRANSISTOR	2SC5511	
		RESISTOR			
	R9001	1-249-381-11	CARBON	1	5% 1/4W
	R9002	1-216-820-11	METAL CHIP	820	5% 1/10W
	R9003	1-216-819-11	METAL CHIP	680	5% 1/10W
	R9004	1-216-834-11	METAL CHIP	12K	5% 1/10W
	R9005	1-216-839-11	METAL CHIP	33K	5% 1/10W
	R9006	1-216-811-11	METAL CHIP	150	5% 1/10W
	R9008	1-216-815-11	METAL CHIP	330	5% 1/10W
	R9009	1-216-813-11	METAL CHIP	220	5% 1/10W
	R9010	1-216-813-11	METAL CHIP	220	5% 1/10W
	R9011	1-249-391-11	CARBON	6.8	5% 1/4W
	R9012	1-249-391-11	CARBON	6.8	5% 1/4W
	R9013	1-249-391-11	CARBON	6.8	5% 1/4W
	R9014	1-249-391-11	CARBON	6.8	5% 1/4W
	R9015	1-249-391-11	CARBON	6.8	5% 1/4W
	R9016	1-249-391-11	CARBON	6.8	5% 1/4W
	R9017	1-249-391-11	CARBON	6.8	5% 1/4W
	R9018	1-249-391-11	CARBON	6.8	5% 1/4W
	R9019	1-216-848-11	METAL CHIP	180K	5% 1/10W
	R9020	1-216-829-11	METAL CHIP	4.7K	5% 1/10W
	R9021	1-216-805-11	METAL CHIP	47	5% 1/10W
	R9022	1-216-805-11	METAL CHIP	47	5% 1/10W
	R9023	1-216-829-11	METAL CHIP	4.7K	5% 1/10W
	R9024	1-216-848-11	METAL CHIP	180K	5% 1/10W
	R9025	1-243-572-71	METAL OXIDE	470	5% 2W
	R9026	1-216-847-11	METAL CHIP	150K	5% 1/10W
	R9027	1-216-847-11	METAL CHIP	150K	5% 1/10W

A

REF. NO.	PART NO.	DESCRIPTION	VALUES		
A					
	* A-1054-149-A	A BOARD, COMPLETE			
☛	* A-1082-955-A	A BOARD, COMPLETE			
	The A Boards are manufactured at different facilities. Either part can be used as a replacement.				
	4-382-854-11	SCREW (M3X10), P, SW (+)			
	CAPACITOR				
C1	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C2	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C3	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C4	1-126-933-11	ELECT	100µF	20%	16V
C5	1-126-933-11	ELECT	100µF	20%	16V
C6	1-126-933-11	ELECT	100µF	20%	16V
C8	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C9	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C10	1-126-935-11	ELECT	470µF	20%	16V
C11	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C12	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C13	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C14	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C15	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C16	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C17	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C18	1-126-964-11	ELECT	10µF	20%	50V
C19	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C20	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C21	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C22	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C23	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C24	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C25	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C26	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C27	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C28	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C32	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C33	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C34	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C35	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C36	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C39	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C40	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C41	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C42	1-162-913-11	CERAMIC CHIP	8pF	0.50pF	50V
C43	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C45	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C49	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C50	1-126-933-11	ELECT	100µF	20%	16V
C52	1-126-964-11	ELECT	10µF	20%	50V
C53	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C54	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V
C57	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C58	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C60	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C62	1-126-925-91	ELECT	470µF	20%	10V
C63	1-126-947-11	ELECT	47µF	20%	35V
C64	1-126-967-11	ELECT	47µF	20%	50V
C65	1-126-933-11	ELECT	100µF	20%	16V
C66	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C67	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C68	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C69	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C70	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C71	1-126-925-91	ELECT	470µF	20%	10V
C72	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C73	1-117-720-11	CERAMIC CHIP	4.7µF		10V
C74	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C75	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C76	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C77	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C78	1-126-933-11	ELECT	100µF	20%	16V
C79	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C80	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C81	1-126-935-11	ELECT	470µF	20%	16V
C82	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C83	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C84	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C85	1-109-982-11	CERAMIC CHIP	1µF	10%	10V
C86	1-126-925-91	ELECT	470µF	20%	10V
C87	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C88	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C89	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C90	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C91	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C92	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C95	1-126-935-11	ELECT	470µF	20%	16V
C96	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C97	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C346	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C98	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C347	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C99	1-164-505-11	CERAMIC CHIP	2.2µF		16V	C350	1-126-933-11	ELECT	100µF	20%	16V
C100	1-164-505-11	CERAMIC CHIP	2.2µF		16V	C351	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C101	1-117-720-11	CERAMIC CHIP	4.7µF		10V	C352	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C106	1-164-505-11	CERAMIC CHIP	2.2µF		16V	C353	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C107	1-126-933-11	ELECT	100µF	20%	16V	C354	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C108	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C355	1-126-933-11	ELECT	100µF	20%	16V
C109	1-164-505-11	CERAMIC CHIP	2.2µF		16V	C356	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C110	1-164-505-11	CERAMIC CHIP	2.2µF		16V	C357	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C111	1-164-505-11	CERAMIC CHIP	2.2µF		16V	C360	1-126-933-11	ELECT	100µF	20%	16V
C112	1-117-720-11	CERAMIC CHIP	4.7µF		10V	C361	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C113	1-117-720-11	CERAMIC CHIP	4.7µF		10V	C363	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C114	1-126-960-11	ELECT	1µF	20%	50V	C364	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C115	1-126-960-11	ELECT	1µF	20%	50V	C365	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C116	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C366	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C123	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C376	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C124	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C377	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C125	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C378	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C126	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C380	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C127	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C381	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C128	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C382	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C303	1-162-917-11	CERAMIC CHIP	15pF	5%	50V	C383	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C304	1-126-933-11	ELECT	100µF	20%	16V	C385	1-126-933-11	ELECT	100µF	20%	16V
C305	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C386	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C306	1-126-964-11	ELECT	10µF	20%	50V	C392	1-126-963-11	ELECT	4.7µF	20%	50V
C317	1-128-954-11	ELECT	1000µF	20%	25V	C398	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C318	1-128-954-11	ELECT	1000µF	20%	25V	C402	1-126-933-11	ELECT	100µF	20%	16V
C320	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V	C403	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C321	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C406	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C322	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C408	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C326	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C412	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C328	1-128-954-11	ELECT	1000µF	20%	25V	C415	1-126-963-11	ELECT	4.7µF	20%	50V
C331	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C416	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C332	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C418	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C334	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C420	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C336	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C425	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C337	1-128-942-31	ELECT	1000µF	20%	6.3V	C426	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C338	1-128-945-31	ELECT	1000µF	20%	10V	C427	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C339	1-128-950-31	ELECT	1000µF	20%	16V	C433	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C342	1-126-916-11	ELECT	1000µF	20%	6.3V	C434	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C343	1-126-926-11	ELECT	1000µF	20%	10V	C435	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C344	1-126-935-11	ELECT	470µF	20%	16V	C436	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C345	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C437	1-162-927-11	CERAMIC CHIP	100pF	5%	50V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C438	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C451	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C452	1-126-960-11	ELECT	1µF	20%	50V
C455	1-126-933-11	ELECT	100µF	20%	16V
C456	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C457	1-126-933-11	ELECT	100µF	20%	16V
C458	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C459	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C460	1-165-733-31	ELECT	100µF	20%	25V
C461	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C462	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C463	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C464	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C465	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C466	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C467	1-126-933-11	ELECT	100µF	20%	16V
C468	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C469	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C470	1-126-933-11	ELECT	100µF	20%	16V
C471	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C472	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C474	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C475	1-126-935-11	ELECT	470µF	20%	16V
C476	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C477	1-126-933-11	ELECT	100µF	20%	16V
C478	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C479	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C480	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C481	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C482	1-126-962-11	ELECT	3.3µF	20%	50V
C483	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C484	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C485	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V
C486	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C487	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C488	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C489	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C490	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C494	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C495	1-126-963-11	ELECT	4.7µF	20%	50V
C496	1-126-933-11	ELECT	100µF	20%	16V
C497	1-126-963-11	ELECT	4.7µF	20%	50V
C501	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C502	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C503	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C504	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C505	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C506	1-126-933-11	ELECT	100µF	20%	16V
C507	1-126-933-11	ELECT	100µF	20%	16V
C508	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C509	1-126-933-11	ELECT	100µF	20%	16V
C510	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C511	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C512	1-110-563-11	CERAMIC CHIP	0.068µF	10%	16V
C513	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C514	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C515	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C516	1-126-933-11	ELECT	100µF	20%	16V
C517	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C518	1-126-933-11	ELECT	100µF	20%	16V
C519	1-126-964-11	ELECT	10µF	20%	50V
C525	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C530	1-126-964-11	ELECT	10µF	20%	50V
C601	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V
C602	1-126-041-11	ELECT	2200µF	20%	35V
C603	1-126-041-11	ELECT	2200µF	20%	35V
C604	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C605	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C606	1-137-190-91	FILM	0.22µF	5%	50V
C607	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C609	1-164-363-11	CERAMIC CHIP	560pF	5%	50V
C611	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C612	1-136-497-81	FILM	0.1µF	5%	50V
C613	1-164-363-11	CERAMIC CHIP	560pF	5%	50V
C614	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V
C615	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C617	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C619	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C620	1-126-964-11	ELECT	10µF	20%	50V
C621	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C622	1-162-975-11	CERAMIC CHIP	24pF	5%	50V
C623	1-126-947-11	ELECT	47µF	20%	35V
C624	1-136-497-81	FILM	0.1µF	5%	50V
C625	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C626	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C628	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C629	1-126-960-11	ELECT	1µF	20%	50V
C630	1-162-969-11	CERAMIC CHIP	0.0068µF	10%	25V

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C631	1-162-959-11	CERAMIC CHIP	330pF	5%	50V	C676	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C633	1-126-947-11	ELECT	47µF	20%	35V	C677	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C634	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C678	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C635	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V	C679	1-165-908-11	CERAMIC CHIP	1µF	10%	10V
C636	1-137-190-91	FILM	0.22µF	5%	50V	C680	1-137-190-91	FILM	0.22µF	5%	50V
C637	1-162-959-11	CERAMIC CHIP	330pF	5%	50V	C681	1-137-365-11	MYLAR	0.0015µF	5%	50V
C638	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C682	1-136-159-00	FILM	0.033µF	5%	50V
C639	1-162-969-11	CERAMIC CHIP	0.0068µF	10%	25V	C683	1-137-367-11	MYLAR	0.0033µF	5%	50V
C640	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C684	1-137-190-91	FILM	0.22µF	5%	50V
C641	1-126-960-11	ELECT	1µF	20%	50V	C685	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C642	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C686	1-126-933-11	ELECT	100µF	20%	16V
C643	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V	C687	1-126-933-11	ELECT	100µF	20%	16V
C644	1-126-947-11	ELECT	47µF	20%	35V	C688	1-136-177-00	FILM	1µF	5%	50V
C645	1-126-066-11	ELECT	470µF	20%	63V	C689	1-136-177-00	FILM	1µF	5%	50V
C646	1-164-363-11	CERAMIC CHIP	560pF	5%	50V	C690	1-136-497-81	FILM	0.1µF	5%	50V
C647	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V	C691	1-136-497-81	FILM	0.1µF	5%	50V
C648	1-100-158-91	CERAMIC CHIP	1000pF	5%	100V	C692	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C649	1-164-363-11	CERAMIC CHIP	560pF	5%	50V	C701	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C650	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C702	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C651	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C703	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C652	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C704	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C653	1-126-964-11	ELECT	10µF	20%	50V	C705	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C654	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C706	1-162-963-11	CERAMIC CHIP	680pF	10%	50V
C655	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C707	1-162-963-11	CERAMIC CHIP	680pF	10%	50V
C656	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C708	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C657	1-128-934-91	CERAMIC CHIP	0.33µF	20%	10V	C709	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C658	1-137-190-91	FILM	0.22µF	5%	50V	C710	1-126-933-11	ELECT	100µF	20%	16V
C659	1-137-365-11	MYLAR	0.0015µF	5%	50V	C711	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C660	1-136-159-00	FILM	0.033µF	5%	50V	C712	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C661	1-137-367-11	MYLAR	0.0033µF	5%	50V	C713	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C662	1-136-287-11	FILM	0.0047µF	5%	100V	C716	1-126-934-11	ELECT	220µF	20%	16V
C663	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C717	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C664	1-136-287-11	FILM	0.0047µF	5%	100V	C718	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
C665	1-136-153-00	FILM	0.01µF	5%	50V	C719	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C666	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V	C720	1-126-933-11	ELECT	100µF	20%	16V
C667	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C721	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C668	1-126-933-11	ELECT	100µF	20%	16V	C722	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C669	1-107-704-51	ELECT	470µF	20%	25V	C723	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C670	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C724	1-162-920-11	CERAMIC CHIP	27pF	5%	50V
C671	1-136-153-00	FILM	0.01µF	5%	50V	C725	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C672	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C726	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C673	1-137-190-91	FILM	0.22µF	5%	50V	C727	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
C674	1-165-908-11	CERAMIC CHIP	1µF	10%	10V	C728	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
C675	1-136-287-11	FILM	0.0047µF	5%	100V	C729	1-164-156-11	CERAMIC CHIP	0.1µF		25V

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C730	1-162-919-11	CERAMIC CHIP	22pF	5%	50V	C875	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C731	1-162-910-11	CERAMIC CHIP	5pF	0.25pF	50V	C876	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C732	1-115-156-11	CERAMIC CHIP	1µF		10V	C877	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C734	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C878	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C735	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C879	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C736	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C880	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C737	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C881	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C738	1-126-942-61	ELECT	1000µF	20%	25V	C882	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C739	1-126-933-11	ELECT	100µF	20%	16V	C883	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C741	1-126-933-11	ELECT	100µF	20%	16V	C884	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C742	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C885	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C743	1-126-933-11	ELECT	100µF	20%	16V	C886	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C744	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C887	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C745	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C888	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C746	1-162-916-11	CERAMIC CHIP	12pF	5%	50V	C889	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C747	1-162-907-11	CERAMIC CHIP	2pF	0.25pF	50V	C890	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C748	1-164-245-11	CERAMIC CHIP	0.015µF	10%	25V	C891	1-126-933-11	ELECT	100µF	20%	16V
C750	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C892	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C751	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V	C893	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C752	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C894	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C753	1-126-933-11	ELECT	100µF	20%	16V	C895	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C760	1-126-925-91	ELECT	470µF	20%	10V	C896	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V
C851	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C897	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C852	1-164-392-11	CERAMIC CHIP	390pF	5%	50V	C898	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C853	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C899	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C854	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C900	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C855	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C901	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C856	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	C902	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C857	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V	C903	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C858	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V	C904	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C859	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V	C906	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C860	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C907	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C861	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V	C908	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C862	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V	C909	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C863	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C910	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C864	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C912	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C865	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C913	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C868	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C914	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C869	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C916	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C870	1-126-933-11	ELECT	100µF	20%	16V	C917	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C871	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C918	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C872	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C919	1-162-925-11	CERAMIC CHIP	68pF	5%	50V
C873	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C920	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C874	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C921	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C922	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C923	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C924	1-126-933-11	ELECT	100µF	20%	16V
	C925	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C926	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C927	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C928	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
	C929	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
	C930	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
	C931	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
	C932	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
	C933	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
	C934	1-164-218-11	CERAMIC CHIP	180pF	5%	50V
	C935	1-164-218-11	CERAMIC CHIP	180pF	5%	50V
	C936	1-164-218-11	CERAMIC CHIP	180pF	5%	50V
	C937	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C938	1-126-933-11	ELECT	100µF	20%	16V
		CONNECTOR				
*	CN2	1-764-334-11	PIN, CONNECTOR(PCB)(V TYPE)			11P
*	CN3	1-564-512-11	PLUG, CONNECTOR			9P
	CN5	1-573-979-22	CONNECTOR, BOARD TO BOARD			11P
*	CN6	1-779-892-11	CONNECTOR, BOARD TO BOARD			10P
*	CN7	1-564-507-11	PLUG, CONNECTOR			4P
*	CN8	1-779-892-11	CONNECTOR, BOARD TO BOARD			10P
*	CN9	1-779-892-11	CONNECTOR, BOARD TO BOARD			10P
*	CN10	1-779-892-11	CONNECTOR, BOARD TO BOARD			10P
*	CN11	1-793-495-11	CONNECTOR, BOARD TO BOARD			50P
*	CN12	1-764-333-11	PIN, CONNECTOR(PCB)(V TYPE)			10P
*	CN13	1-764-334-11	PIN, CONNECTOR(PCB)(V TYPE)			11P
*	CN14	1-564-507-11	PLUG, CONNECTOR			4P
*	CN15	1-564-512-11	PLUG, CONNECTOR			9P
*	CN17	1-564-508-11	PLUG, CONNECTOR			5P
*	CN18	1-564-509-11	PLUG, CONNECTOR			6P
*	CN19	1-564-511-11	PLUG, CONNECTOR			8P
*	CN20	1-779-892-11	CONNECTOR, BOARD TO BOARD			10P
	CN24	1-695-915-11	TAB (CONTACT)			
	CN25	1-695-915-11	TAB (CONTACT)			
	CN26	1-785-900-21	CONNECTOR			5P
*	CN27	1-785-125-21	CONNECTOR			6P
	CN28	1-785-900-21	CONNECTOR			5P
*	CN29	1-785-125-21	CONNECTOR			6P

REF. NO.	PART NO.	DESCRIPTION	VALUES
	DIODE		
D2	8-719-977-28	DIODE	DTZ10B
D3	8-719-977-28	DIODE	DTZ10B
D4	8-719-977-28	DIODE	DTZ10B
D5	8-719-977-28	DIODE	DTZ10B
D6	8-719-977-28	DIODE	DTZ10B
D7	8-719-977-28	DIODE	DTZ10B
D8	8-719-977-28	DIODE	DTZ10B
D9	8-719-977-28	DIODE	DTZ10B
D10	8-719-977-28	DIODE	DTZ10B
D11	8-719-977-28	DIODE	DTZ10B
D12	8-719-977-28	DIODE	DTZ10B
D13	8-719-977-28	DIODE	DTZ10B
D14	8-719-977-28	DIODE	DTZ10B
D15	8-719-977-28	DIODE	DTZ10B
D16	8-719-977-28	DIODE	DTZ10B
D17	8-719-977-28	DIODE	DTZ10B
D18	8-719-977-28	DIODE	DTZ10B
D19	8-719-977-28	DIODE	DTZ10B
D20	8-719-977-28	DIODE	DTZ10B
D21	8-719-977-28	DIODE	DTZ10B
D23	8-719-977-28	DIODE	DTZ10B
D24	8-719-977-28	DIODE	DTZ10B
D25	8-719-977-28	DIODE	DTZ10B
D26	8-719-977-28	DIODE	DTZ10B
D27	8-719-977-28	DIODE	DTZ10B
D28	8-719-977-28	DIODE	DTZ10B
D35	8-719-066-11	DIODE	1PS184-115
D36	8-719-977-28	DIODE	DTZ10B
D37	8-719-977-28	DIODE	DTZ10B
D38	8-719-977-28	DIODE	DTZ10B
D39	8-719-977-28	DIODE	DTZ10B
D40	8-719-977-28	DIODE	DTZ10B
D41	8-719-977-28	DIODE	DTZ10B
D42	8-719-977-28	DIODE	DTZ10B
D43	8-719-977-28	DIODE	DTZ10B
D44	8-719-081-97	DIODE	MMDL914T1
D45	8-719-081-97	DIODE	MMDL914T1
D304	8-719-078-04	DIODE	EC31QS03L-TE12L
D305	8-719-078-04	DIODE	EC31QS03L-TE12L
D306	8-719-078-04	DIODE	EC31QS03L-TE12L
D307	8-719-036-94	DIODE	RD5.6SB-T1
D308	8-719-081-97	DIODE	MMDL914T1

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REF. NO.	PART NO.	DESCRIPTION	VALUES
D309	8-719-081-97	DIODE	MMDL914T1
D310	8-719-056-83	DIODE	UDZ-TE-17-6.8B
D311	8-719-081-97	DIODE	MMDL914T1
D312	8-719-977-28	DIODE	DTZ10B
D313	8-719-028-45	DIODE	D2L20U
D451	6-500-654-01	DIODE	MM3Z3V0T1
D452	8-719-081-97	DIODE	MMDL914T1
D453	8-719-081-97	DIODE	MMDL914T1
D454	8-719-081-97	DIODE	MMDL914T1
D456	8-719-036-94	DIODE	RD5.6SB-T1
D457	8-719-081-97	DIODE	MMDL914T1
D458	8-719-977-28	DIODE	DTZ10B
D459	8-719-081-97	DIODE	MMDL914T1
D460	8-719-977-28	DIODE	DTZ10B
D470	8-719-081-97	DIODE	MMDL914T1
D471	8-719-081-97	DIODE	MMDL914T1
D501	8-719-081-97	DIODE	MMDL914T1
D602	6-500-028-01	DIODE	MM3Z9V1ST1
D603	1-216-295-91	SHORT CHIP	
D701	8-719-066-11	DIODE	1PS184-115
D703	8-719-081-97	DIODE	MMDL914T1
D706	8-719-083-57	DIODE	UDZSTE-173.6B
D707	8-719-081-97	DIODE	MMDL914T1
D708	8-719-066-11	DIODE	1PS184-115
D709	8-719-066-11	DIODE	1PS184-115
D711	8-719-081-97	DIODE	MMDL914T1
D712	8-719-081-97	DIODE	MMDL914T1
D720	8-719-066-11	DIODE	1PS184-115
D721	8-719-081-97	DIODE	MMDL914T1
D851	8-719-976-99	DIODE	DTZ5.1B
D852	8-719-976-99	DIODE	DTZ5.1B
D853	8-719-976-99	DIODE	DTZ5.1B
D854	8-719-976-99	DIODE	DTZ5.1B
D855	8-719-081-97	DIODE	MMDL914T1
D856	8-719-081-97	DIODE	MMDL914T1
D857	8-719-081-97	DIODE	MMDL914T1
D858	8-719-081-97	DIODE	MMDL914T1

FERRITE BEAD

FB301	1-412-911-11	FERRITE	0µH
FB302	1-412-911-11	FERRITE	0µH
FB303	1-412-911-11	FERRITE	0µH
FB305	1-414-445-11	FERRITE	0µH
FB306	1-414-445-11	FERRITE	0µH
FB602	1-469-578-11	FERRITE	1.1µH
FB603	1-469-578-11	FERRITE	1.1µH
FB604	1-469-578-11	FERRITE	1.1µH
FB605	1-469-578-11	FERRITE	1.1µH
FB703	1-543-949-22	FERRITE	0µH
FB852	1-414-445-11	FERRITE	0µH
FB853	1-414-445-11	FERRITE	0µH
FB854	1-414-445-11	FERRITE	0µH
FB855	1-414-445-11	FERRITE	0µH
FB856	1-414-445-11	FERRITE	0µH
FB857	1-414-445-11	FERRITE	0µH
FB858	1-414-445-11	FERRITE	0µH
FB859	1-414-445-11	FERRITE	0µH
FB860	1-414-445-11	FERRITE	0µH
FB861	1-414-445-11	FERRITE	0µH
FB862	1-414-445-11	FERRITE	0µH
FB863	1-414-445-11	FERRITE	0µH
FB864	1-414-445-11	FERRITE	0µH
FB865	1-414-445-11	FERRITE	0µH
FB866	1-414-445-11	FERRITE	0µH
FB867	1-414-445-11	FERRITE	0µH
FB868	1-414-445-11	FERRITE	0µH
FB869	1-414-445-11	FERRITE	0µH
FB870	1-414-445-11	FERRITE	0µH
FB871	1-414-445-11	FERRITE	0µH
FB872	1-414-445-11	FERRITE	0µH
FB873	1-414-445-11	FERRITE	0µH
FB874	1-414-445-11	FERRITE	0µH
FB875	1-414-445-11	FERRITE	0µH
FB876	1-414-445-11	FERRITE	0µH
FB877	1-414-445-11	FERRITE	0µH
FB878	1-414-445-11	FERRITE	0µH
FB879	1-414-445-11	FERRITE	0µH
FB880	1-414-445-11	FERRITE	0µH
FB882	1-414-445-11	FERRITE	0µH
FB883	1-414-445-11	FERRITE	0µH

FILTER

FL302	1-239-848-21	FILTER, LOW PASS
FL305	1-239-848-21	FILTER, LOW PASS
FL306	1-239-848-21	FILTER, LOW PASS

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REF. NO.	PART NO.	DESCRIPTION	VALUES
	IC		
IC1	8-753-204-12	IC	CXA2209Q-T6
IC2	8-752-107-98	IC	CXA2188Q-T4
IC302	8-759-659-28	IC	SI-8033S
IC303	8-759-474-09	IC	SI-8050S-LF1101
IC304	6-703-656-01	IC	SI-8090S
IC305	8-752-394-69	IC	CXD2073Q-T4
IC306	8-752-102-21	IC	CXA2103AQ
IC451	6-706-445-01	IC	NJM2880U1-05-TE1
IC452	8-752-102-68	IC	CXA2170Q
IC601	6-704-233-01	IC	TDA7490
IC602	8-759-278-58	IC	NJM4558V-TE2
IC603	6-704-236-01	IC	NJW1148
IC604	8-759-569-92	IC	NJM2370U09-TE2
IC701	6-706-444-01	IC	NJM2880U1-33-TE1
IC702	6-706-730-01	IC	M306V7MG-080FP
IC703	6-801-375-01	IC	PST9129NL
IC704	6-704-573-01	IC	M24C32-WMN6T(B)
IC705	6-706-729-01	IC	M306VSMG-538FP
	(A-1054-149-A	**A BOARD, COMPLETE ONLY)**	
☛ IC705	6-804-751-01	IC	M306VSMG-539FP
	(A-1082-955-A	**A BOARD, COMPLETE ONLY)**	
IC706	8-759-488-29	IC	TC7W66FU(TE12R)
IC707	6-704-573-01	IC	M24C32-WMN6T(B)
IC851	8-759-830-08	IC	NJM2068V-TE2
IC852	8-759-278-58	IC	NJM4558V-TE2
IC853	8-759-278-58	IC	NJM4558V-TE2
IC854	8-759-641-26	IC	NJM2391DL1-33(TE1)
IC855	6-704-266-01	IC	CM0033AF
IC856	8-753-224-46	IC	CXP86460-653Q
IC857	6-704-067-01	IC	M24128-BWMN6T(A)
IC858	8-759-352-91	IC	PST9143NL
IC859	8-759-700-65	IC	NJM79L05A
IC860	8-759-830-08	IC	NJM2068V-TE2
IC861	8-759-830-08	IC	NJM2068V-TE2
IC862	8-759-830-08	IC	NJM2068V-TE2
	JACK		
J1	1-780-168-11	TERMINAL BLOCK, S	8P
J3	1-794-118-11	JACK BLOCK, PIN	3P
J5	1-794-116-11	JACK BLOCK, PIN	2P
* J6	1-818-012-11	PIN JACK BLOCK	10P
J8	1-565-790-21	JACK, SMALL TYPE	2P

REF. NO.	PART NO.	DESCRIPTION	VALUES
	COIL		
L1	1-469-320-21	INDUCTOR	100µH
L2	1-469-320-21	INDUCTOR	100µH
L3	1-469-317-21	INDUCTOR	10µH
L6	1-400-397-11	INDUCTOR	10µH
L8	1-414-856-11	INDUCTOR	10µH
L9	1-414-856-11	INDUCTOR	10µH
L10	1-414-856-11	INDUCTOR	10µH
L11	1-414-856-11	INDUCTOR	10µH
L12	1-400-397-11	INDUCTOR	10µH
L13	1-400-397-11	INDUCTOR	10µH
L14	1-400-397-11	INDUCTOR	10µH
L15	1-400-397-11	INDUCTOR	10µH
L16	1-400-397-11	INDUCTOR	10µH
L302	1-400-397-11	INDUCTOR	10µH
L306	1-412-537-31	INDUCTOR	100µH
L307	1-412-525-31	INDUCTOR	10µH
L308	1-412-525-31	INDUCTOR	10µH
L310	1-456-414-11	COIL, CHOPPER	
L311	1-456-414-11	COIL, CHOPPER	
L312	1-456-414-11	COIL, CHOPPER	
L313	1-412-525-31	INDUCTOR	10µH
L314	1-412-525-31	INDUCTOR	10µH
L315	1-412-525-31	INDUCTOR	10µH
L316	1-400-397-11	INDUCTOR	10µH
L317	1-400-397-11	INDUCTOR	10µH
L320	1-400-397-11	INDUCTOR	10µH
L323	1-400-397-11	INDUCTOR	10µH
L451	1-400-397-11	INDUCTOR	10µH
L452	1-400-397-11	INDUCTOR	10µH
L453	1-400-397-11	INDUCTOR	10µH
L454	1-469-559-21	INDUCTOR	47µH
L455	1-400-397-11	INDUCTOR	10µH
L456	1-400-397-11	INDUCTOR	10µH
L457	1-400-397-11	INDUCTOR	10µH
L458	1-400-397-11	INDUCTOR	10µH
L601	1-456-621-11	INDUCTOR	35µH
L602	1-456-620-11	INDUCTOR	25µH
L603	1-456-620-11	INDUCTOR	25µH
L604	1-456-621-11	INDUCTOR	35µH
L701	1-400-397-11	INDUCTOR	10µH
L702	1-400-397-11	INDUCTOR	10µH
L703	1-412-943-11	INDUCTOR	2.2µH

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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REF. NO.	PART NO.	DESCRIPTION	VALUES
L704	1-400-397-11	INDUCTOR	10µH
L705	1-400-397-11	INDUCTOR	10µH
L851	1-469-552-21	INDUCTOR	3.3µH
	IC LINK		
PS1	1-532-679-00	IC LINK	0.6A 50V
⚠ PS600	1-576-390-91	IC LINK	2.5A 50V
⚠ PS601	1-576-390-91	IC LINK	2.5A 50V
	TRANSISTOR		
Q1	8-729-010-25	TRANSISTOR	MSD601-RT1
Q2	8-729-010-05	TRANSISTOR	MSB709-RT1
Q3	8-729-010-05	TRANSISTOR	MSB709-RT1
Q4	8-729-010-25	TRANSISTOR	MSD601-RT1
Q5	8-729-010-25	TRANSISTOR	MSD601-RT1
Q6	8-729-010-05	TRANSISTOR	MSB709-RT1
Q7	8-729-010-25	TRANSISTOR	MSD601-RT1
Q9	8-729-010-25	TRANSISTOR	MSD601-RT1
Q10	8-729-010-05	TRANSISTOR	MSB709-RT1
Q12	8-729-010-05	TRANSISTOR	MSB709-RT1
Q13	8-729-010-05	TRANSISTOR	MSB709-RT1
Q14	8-729-010-05	TRANSISTOR	MSB709-RT1
Q16	8-729-010-05	TRANSISTOR	MSB709-RT1
Q20	8-729-010-25	TRANSISTOR	MSD601-RT1
Q21	8-729-010-05	TRANSISTOR	MSB709-RT1
Q23	8-729-010-05	TRANSISTOR	MSB709-RT1
Q24	8-729-122-63	TRANSISTOR	2SA1226-E4
Q25	8-729-122-63	TRANSISTOR	2SA1226-E4
Q26	8-729-122-63	TRANSISTOR	2SA1226-E4
Q27	8-729-010-05	TRANSISTOR	MSB709-RT1
Q28	8-729-010-25	TRANSISTOR	MSD601-RT1
Q29	8-729-010-25	TRANSISTOR	MSD601-RT1
Q30	8-729-010-05	TRANSISTOR	MSB709-RT1
Q31	8-729-010-25	TRANSISTOR	MSD601-RT1
Q32	8-729-010-25	TRANSISTOR	MSD601-RT1
Q33	8-729-010-05	TRANSISTOR	MSB709-RT1
Q34	8-729-010-25	TRANSISTOR	MSD601-RT1
Q35	8-729-010-25	TRANSISTOR	MSD601-RT1
Q36	8-729-010-05	TRANSISTOR	MSB709-RT1
Q304	8-729-010-05	TRANSISTOR	MSB709-RT1
Q306	8-729-010-25	TRANSISTOR	MSD601-RT1
Q308	8-729-010-05	TRANSISTOR	MSB709-RT1
Q311	8-729-010-25	TRANSISTOR	MSD601-RT1
Q312	8-729-010-05	TRANSISTOR	MSB709-RT1
Q313	8-729-010-25	TRANSISTOR	MSD601-RT1
Q322	8-729-010-25	TRANSISTOR	MSD601-RT1
Q323	8-729-010-25	TRANSISTOR	MSD601-RT1
Q324	8-729-010-25	TRANSISTOR	MSD601-RT1
Q325	8-729-010-25	TRANSISTOR	MSD601-RT1
Q451	8-729-010-05	TRANSISTOR	MSB709-RT1
Q452	8-729-010-25	TRANSISTOR	MSD601-RT1
Q453	8-729-010-25	TRANSISTOR	MSD601-RT1
Q454	8-729-010-25	TRANSISTOR	MSD601-RT1
Q455	8-729-010-25	TRANSISTOR	MSD601-RT1
Q456	8-729-010-25	TRANSISTOR	MSD601-RT1
Q457	8-729-010-25	TRANSISTOR	MSD601-RT1
Q458	8-729-010-25	TRANSISTOR	MSD601-RT1
Q459	8-729-010-25	TRANSISTOR	MSD601-RT1
Q460	8-729-010-25	TRANSISTOR	MSD601-RT1
Q461	8-729-122-63	TRANSISTOR	2SA1226-E4
Q462	8-729-010-05	TRANSISTOR	MSB709-RT1
Q463	8-729-010-05	TRANSISTOR	MSB709-RT1
Q464	8-729-010-25	TRANSISTOR	MSD601-RT1
Q465	8-729-010-05	TRANSISTOR	MSB709-RT1
Q466	8-729-010-25	TRANSISTOR	MSD601-RT1
Q467	8-729-010-25	TRANSISTOR	MSD601-RT1
Q468	8-729-010-25	TRANSISTOR	MSD601-RT1
Q469	8-729-010-05	TRANSISTOR	MSB709-RT1
Q470	8-729-010-05	TRANSISTOR	MSB709-RT1
Q471	8-729-010-05	TRANSISTOR	MSB709-RT1
Q472	8-729-010-25	TRANSISTOR	MSD601-RT1
Q473	8-729-122-63	TRANSISTOR	2SA1226-E4
Q474	8-729-122-63	TRANSISTOR	2SA1226-E4
Q476	8-729-122-63	TRANSISTOR	2SA1226-E4
Q477	8-729-028-97	TRANSISTOR	DTC114TUA-T106
Q478	8-729-028-97	TRANSISTOR	DTC114TUA-T106
Q479	8-729-028-97	TRANSISTOR	DTC114TUA-T106
Q601	8-729-010-25	TRANSISTOR	MSD601-RT1
Q603	8-729-010-25	TRANSISTOR	MSD601-RT1
Q604	8-729-010-25	TRANSISTOR	MSD601-RT1
Q605	8-729-010-05	TRANSISTOR	MSB709-RT1
Q701	8-729-010-25	TRANSISTOR	MSD601-RT1
Q702	8-729-010-25	TRANSISTOR	MSD601-RT1
Q703	8-729-010-25	TRANSISTOR	MSD601-RT1
Q705	8-729-010-25	TRANSISTOR	MSD601-RT1
Q706	8-729-010-25	TRANSISTOR	MSD601-RT1

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REF. NO.	PART NO.	DESCRIPTION	VALUES
Q707	8-729-010-25	TRANSISTOR	MSD601-RT1
Q709	8-729-010-25	TRANSISTOR	MSD601-RT1
Q710	8-729-010-25	TRANSISTOR	MSD601-RT1
Q711	8-729-010-05	TRANSISTOR	MSB709-RT1
Q712	8-729-010-05	TRANSISTOR	MSB709-RT1
Q714	8-729-010-25	TRANSISTOR	MSD601-RT1
Q717	8-729-010-25	TRANSISTOR	MSD601-RT1
Q718	8-729-010-25	TRANSISTOR	MSD601-RT1
Q719	8-729-010-25	TRANSISTOR	MSD601-RT1
Q721	8-729-010-25	TRANSISTOR	MSD601-RT1
Q722	8-729-029-14	TRANSISTOR	DTC144EUA-T106
Q723	8-729-010-25	TRANSISTOR	MSD601-RT1
Q730	8-729-010-05	TRANSISTOR	MSB709-RT1
Q851	8-729-010-25	TRANSISTOR	MSD601-RT1
Q852	8-729-010-05	TRANSISTOR	MSB709-RT1
Q853	8-729-010-05	TRANSISTOR	MSB709-RT1
Q854	8-729-010-25	TRANSISTOR	MSD601-RT1
Q855	8-729-010-05	TRANSISTOR	MSB709-RT1
Q856	8-729-010-25	TRANSISTOR	MSD601-RT1
Q857	8-729-010-05	TRANSISTOR	MSB709-RT1
Q858	8-729-010-25	TRANSISTOR	MSD601-RT1
Q859	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
Q860	8-729-028-28	TRANSISTOR	2SK2036(TE85L)

RESISTOR

R1	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R2	1-216-805-11	METAL CHIP	47	5%	1/10W
R3	1-216-805-11	METAL CHIP	47	5%	1/10W
R4	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6	1-216-853-11	METAL CHIP	470K	5%	1/10W
R7	1-218-285-11	METAL CHIP	75	5%	1/10W
R8	1-218-285-11	METAL CHIP	75	5%	1/10W
R9	1-218-285-11	METAL CHIP	75	5%	1/10W
R10	1-216-853-11	METAL CHIP	470K	5%	1/10W
R11	1-216-853-11	METAL CHIP	470K	5%	1/10W
R12	1-218-285-11	METAL CHIP	75	5%	1/10W
R13	1-218-285-11	METAL CHIP	75	5%	1/10W
R14	1-218-285-11	METAL CHIP	75	5%	1/10W
R15	1-216-833-11	METAL CHIP	10K	5%	1/10W
R16	1-216-833-11	METAL CHIP	10K	5%	1/10W
R17	1-216-853-11	METAL CHIP	470K	5%	1/10W
R18	1-216-853-11	METAL CHIP	470K	5%	1/10W
R19	1-218-285-11	METAL CHIP	75	5%	1/10W
R20	1-216-853-11	METAL CHIP	470K	5%	1/10W
R21	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R22	1-216-821-11	METAL CHIP	1K	5%	1/10W
R23	1-216-857-11	METAL CHIP	1M	5%	1/10W
R24	1-216-847-11	METAL CHIP	150K	5%	1/10W
R25	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R26	1-216-837-11	METAL CHIP	22K	5%	1/10W
R27	1-216-839-11	METAL CHIP	33K	5%	1/10W
R28	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R30	1-216-821-11	METAL CHIP	1K	5%	1/10W
R31	1-216-833-11	METAL CHIP	10K	5%	1/10W
R32	1-216-864-11	SHORT CHIP			
R33	1-216-864-11	SHORT CHIP			
R34	1-216-864-11	SHORT CHIP			
R36	1-216-864-11	SHORT CHIP			
R37	1-216-864-11	SHORT CHIP			
R39	1-216-864-11	SHORT CHIP			
R40	1-216-833-11	METAL CHIP	10K	5%	1/10W
R41	1-216-864-11	SHORT CHIP			
R42	1-216-864-11	SHORT CHIP			
R48	1-216-809-11	METAL CHIP	100	5%	1/10W
R50	1-216-809-11	METAL CHIP	100	5%	1/10W
R52	1-216-845-11	METAL CHIP	100K	5%	1/10W
R54	1-216-809-11	METAL CHIP	100	5%	1/10W
R57	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R58	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R60	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R62	1-216-837-11	METAL CHIP	22K	5%	1/10W
R65	1-216-833-11	METAL CHIP	10K	5%	1/10W
R66	1-216-821-11	METAL CHIP	1K	5%	1/10W
R67	1-216-839-11	METAL CHIP	33K	5%	1/10W
R68	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R69	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R70	1-216-821-11	METAL CHIP	1K	5%	1/10W
R72	1-216-833-11	METAL CHIP	10K	5%	1/10W
R73	1-216-821-11	METAL CHIP	1K	5%	1/10W
R74	1-216-809-11	METAL CHIP	100	5%	1/10W
R75	1-216-847-11	METAL CHIP	150K	5%	1/10W
R77	1-216-857-11	METAL CHIP	1M	5%	1/10W
R78	1-216-842-11	METAL CHIP	56K	5%	1/10W
R79	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R80	1-216-864-11	SHORT CHIP			
R81	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R82	1-216-864-11	SHORT CHIP			
R83	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R84	1-216-833-11	METAL CHIP	10K	5%	1/10W
R85	1-216-857-11	METAL CHIP	1M	5%	1/10W
R89	1-216-864-11	SHORT CHIP			
R90	1-216-864-11	SHORT CHIP			
R91	1-216-833-11	METAL CHIP	10K	5%	1/10W
R93	1-216-821-11	METAL CHIP	1K	5%	1/10W
R94	1-216-813-11	METAL CHIP	220	5%	1/10W
R95	1-216-819-11	METAL CHIP	680	5%	1/10W
R97	1-216-809-11	METAL CHIP	100	5%	1/10W
R98	1-216-864-11	SHORT CHIP			
R99	1-216-864-11	SHORT CHIP			
R100	1-216-809-11	METAL CHIP	100	5%	1/10W
R101	1-218-285-11	METAL CHIP	75	5%	1/10W
R102	1-218-285-11	METAL CHIP	75	5%	1/10W
R103	1-218-285-11	METAL CHIP	75	5%	1/10W
R106	1-216-819-11	METAL CHIP	680	5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R108	1-216-843-11	METAL CHIP	68K	5%	1/10W
R109	1-216-806-11	METAL CHIP	56	5%	1/10W
R110	1-216-806-11	METAL CHIP	56	5%	1/10W
R111	1-216-806-11	METAL CHIP	56	5%	1/10W
R112	1-216-813-11	METAL CHIP	220	5%	1/10W
R113	1-216-813-11	METAL CHIP	220	5%	1/10W
R114	1-216-809-11	METAL CHIP	100	5%	1/10W
R115	1-216-809-11	METAL CHIP	100	5%	1/10W
R116	1-216-819-11	METAL CHIP	680	5%	1/10W
R118	1-216-843-11	METAL CHIP	68K	5%	1/10W
R119	1-216-813-11	METAL CHIP	220	5%	1/10W
R120	1-216-813-11	METAL CHIP	220	5%	1/10W
R121	1-216-809-11	METAL CHIP	100	5%	1/10W
R122	1-216-819-11	METAL CHIP	680	5%	1/10W
R125	1-216-819-11	METAL CHIP	680	5%	1/10W
R126	1-216-809-11	METAL CHIP	100	5%	1/10W
R128	1-216-809-11	METAL CHIP	100	5%	1/10W
R129	1-216-809-11	METAL CHIP	100	5%	1/10W
R131	1-216-809-11	METAL CHIP	100	5%	1/10W
R132	1-216-809-11	METAL CHIP	100	5%	1/10W
R133	1-216-809-11	METAL CHIP	100	5%	1/10W
R135	1-216-809-11	METAL CHIP	100	5%	1/10W
R136	1-216-809-11	METAL CHIP	100	5%	1/10W
R137	1-216-817-11	METAL CHIP	470	5%	1/10W
R138	1-216-809-11	METAL CHIP	100	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R139	1-216-817-11	METAL CHIP	470	5%	1/10W
R140	1-216-864-11	SHORT CHIP			
R142	1-216-864-11	SHORT CHIP			
R143	1-216-821-11	METAL CHIP	1K	5%	1/10W
R144	1-216-817-11	METAL CHIP	470	5%	1/10W
R145	1-216-809-11	METAL CHIP	100	5%	1/10W
R146	1-216-817-11	METAL CHIP	470	5%	1/10W
R147	1-216-817-11	METAL CHIP	470	5%	1/10W
R148	1-216-809-11	METAL CHIP	100	5%	1/10W
R149	1-216-817-11	METAL CHIP	470	5%	1/10W
R150	1-216-809-11	METAL CHIP	100	5%	1/10W
R151	1-216-833-11	METAL CHIP	10K	5%	1/10W
R152	1-216-817-11	METAL CHIP	470	5%	1/10W
R153	1-216-817-11	METAL CHIP	470	5%	1/10W
R154	1-216-817-11	METAL CHIP	470	5%	1/10W
R155	1-216-809-11	METAL CHIP	100	5%	1/10W
R156	1-216-817-11	METAL CHIP	470	5%	1/10W
R157	1-216-809-11	METAL CHIP	100	5%	1/10W
R158	1-216-817-11	METAL CHIP	470	5%	1/10W
R159	1-216-809-11	METAL CHIP	100	5%	1/10W
R160	1-216-809-11	METAL CHIP	100	5%	1/10W
R161	1-216-809-11	METAL CHIP	100	5%	1/10W
R162	1-216-809-11	METAL CHIP	100	5%	1/10W
R163	1-216-817-11	METAL CHIP	470	5%	1/10W
R164	1-216-817-11	METAL CHIP	470	5%	1/10W
R165	1-216-817-11	METAL CHIP	470	5%	1/10W
R166	1-216-817-11	METAL CHIP	470	5%	1/10W
R167	1-216-817-11	METAL CHIP	470	5%	1/10W
R168	1-216-817-11	METAL CHIP	470	5%	1/10W
R169	1-216-817-11	METAL CHIP	470	5%	1/10W
R170	1-216-809-11	METAL CHIP	100	5%	1/10W
R171	1-216-809-11	METAL CHIP	100	5%	1/10W
R172	1-216-809-11	METAL CHIP	100	5%	1/10W
R173	1-216-809-11	METAL CHIP	100	5%	1/10W
R174	1-216-809-11	METAL CHIP	100	5%	1/10W
R175	1-216-809-11	METAL CHIP	100	5%	1/10W
R176	1-216-809-11	METAL CHIP	100	5%	1/10W
R177	1-216-809-11	METAL CHIP	100	5%	1/10W
R180	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R181	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R182	1-216-817-11	METAL CHIP	470	5%	1/10W
R183	1-216-817-11	METAL CHIP	470	5%	1/10W
R184	1-216-853-11	METAL CHIP	470K	5%	1/10W
R185	1-216-853-11	METAL CHIP	470K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R186	1-216-817-11	METAL CHIP	470	5%	1/10W	R248	1-216-821-11	METAL CHIP	1K	5%	1/10W
R187	1-216-817-11	METAL CHIP	470	5%	1/10W	R307	1-216-809-11	METAL CHIP	100	5%	1/10W
R188	1-216-864-11	SHORT CHIP				R308	1-216-821-11	METAL CHIP	1K	5%	1/10W
R189	1-216-864-11	SHORT CHIP				R311	1-216-821-11	METAL CHIP	1K	5%	1/10W
R192	1-216-864-11	SHORT CHIP				R312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R193	1-216-864-11	SHORT CHIP				R314	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R194	1-216-864-11	SHORT CHIP				R316	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R197	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R320	1-216-821-11	METAL CHIP	1K	5%	1/10W
R198	1-216-845-11	METAL CHIP	100K	5%	1/10W	R321	1-216-821-11	METAL CHIP	1K	5%	1/10W
R199	1-216-849-11	METAL CHIP	220K	5%	1/10W	R322	1-218-864-11	METAL CHIP	5.1K	0.50%	1/10W
R200	1-216-845-11	METAL CHIP	100K	5%	1/10W	R323	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R201	1-216-845-11	METAL CHIP	100K	5%	1/10W	R324	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W	R325	1-216-821-11	METAL CHIP	1K	5%	1/10W
R204	1-216-849-11	METAL CHIP	220K	5%	1/10W	R328	1-249-377-11	CARBON	0.47	5%	1/4W
R205	1-216-849-11	METAL CHIP	220K	5%	1/10W	R330	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R206	1-216-845-11	METAL CHIP	100K	5%	1/10W	R331	1-216-821-11	METAL CHIP	1K	5%	1/10W
R207	1-216-841-11	METAL CHIP	47K	5%	1/10W	R332	1-218-889-11	METAL CHIP	56K	0.50%	1/10W
R208	1-216-833-11	METAL CHIP	10K	5%	1/10W	R335	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R209	1-216-845-11	METAL CHIP	100K	5%	1/10W	R336	1-211-981-11	METAL CHIP	33	0.50%	1/10W
R210	1-216-864-11	SHORT CHIP				R337	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R215	1-216-809-11	METAL CHIP	100	5%	1/10W	R338	1-211-969-11	METAL CHIP	10	0.50%	1/10W
R216	1-216-811-11	METAL CHIP	150	5%	1/10W	R339	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R217	1-216-811-11	METAL CHIP	150	5%	1/10W	R340	1-211-977-11	METAL CHIP	22	0.50%	1/10W
R218	1-216-811-11	METAL CHIP	150	5%	1/10W	R343	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R219	1-216-809-11	METAL CHIP	100	5%	1/10W	R346	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R220	1-216-809-11	METAL CHIP	100	5%	1/10W	R347	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R222	1-216-853-11	METAL CHIP	470K	5%	1/10W	R348	1-216-864-11	SHORT CHIP			
R223	1-216-853-11	METAL CHIP	470K	5%	1/10W	R361	1-216-821-11	METAL CHIP	1K	5%	1/10W
R225	1-216-811-11	METAL CHIP	150	5%	1/10W	R365	1-216-811-11	METAL CHIP	150	5%	1/10W
R226	1-216-811-11	METAL CHIP	150	5%	1/10W	R366	1-216-812-11	METAL CHIP	180	5%	1/10W
R227	1-216-811-11	METAL CHIP	150	5%	1/10W	R367	1-216-839-11	METAL CHIP	33K	5%	1/10W
R228	1-216-853-11	METAL CHIP	470K	5%	1/10W	R368	1-216-837-11	METAL CHIP	22K	5%	1/10W
R229	1-216-853-11	METAL CHIP	470K	5%	1/10W	R369	1-216-839-11	METAL CHIP	33K	5%	1/10W
R230	1-216-811-11	METAL CHIP	150	5%	1/10W	R370	1-216-837-11	METAL CHIP	22K	5%	1/10W
R231	1-216-811-11	METAL CHIP	150	5%	1/10W	R371	1-216-809-11	METAL CHIP	100	5%	1/10W
R232	1-216-811-11	METAL CHIP	150	5%	1/10W	R372	1-216-809-11	METAL CHIP	100	5%	1/10W
R235	1-216-811-11	METAL CHIP	150	5%	1/10W	R373	1-216-817-11	METAL CHIP	470	5%	1/10W
R236	1-216-811-11	METAL CHIP	150	5%	1/10W	R374	1-216-817-11	METAL CHIP	470	5%	1/10W
R237	1-216-811-11	METAL CHIP	150	5%	1/10W	R375	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R242	1-216-809-11	METAL CHIP	100	5%	1/10W	R376	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R243	1-216-821-11	METAL CHIP	1K	5%	1/10W	R377	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R244	1-216-809-11	METAL CHIP	100	5%	1/10W	R378	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R245	1-216-821-11	METAL CHIP	1K	5%	1/10W	R379	1-216-817-11	METAL CHIP	470	5%	1/10W
R247	1-216-841-11	METAL CHIP	47K	5%	1/10W	R380	1-216-817-11	METAL CHIP	470	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R385	1-216-835-11	METAL CHIP	15K	5%	1/10W	R491	1-216-821-11	METAL CHIP	1K	5%	1/10W
R389	1-216-809-11	METAL CHIP	100	5%	1/10W	R492	1-216-809-11	METAL CHIP	100	5%	1/10W
R390	1-216-809-11	METAL CHIP	100	5%	1/10W	R493	1-216-834-11	METAL CHIP	12K	5%	1/10W
R393	1-216-828-11	METAL CHIP	3.9K	5%	1/10W	R494	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R396	1-216-864-11	SHORT CHIP				R495	1-216-809-11	METAL CHIP	100	5%	1/10W
R397	1-216-864-11	SHORT CHIP				R496	1-216-821-11	METAL CHIP	1K	5%	1/10W
R398	1-216-864-11	SHORT CHIP				R497	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R399	1-216-809-11	METAL CHIP	100	5%	1/10W	R498	1-216-809-11	METAL CHIP	100	5%	1/10W
R400	1-216-809-11	METAL CHIP	100	5%	1/10W	R499	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R451	1-216-833-11	METAL CHIP	10K	5%	1/10W	R500	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R452	1-216-821-11	METAL CHIP	1K	5%	1/10W	R501	1-216-863-11	METAL CHIP	3.3M	5%	1/10W
R453	1-216-833-11	METAL CHIP	10K	5%	1/10W	R502	1-216-809-11	METAL CHIP	100	5%	1/10W
R454	1-216-833-11	METAL CHIP	10K	5%	1/10W	R503	1-216-809-11	METAL CHIP	100	5%	1/10W
R455	1-216-809-11	METAL CHIP	100	5%	1/10W	R504	1-216-809-11	METAL CHIP	100	5%	1/10W
R457	1-216-809-11	METAL CHIP	100	5%	1/10W	R505	1-216-841-11	METAL CHIP	47K	5%	1/10W
R459	1-216-809-11	METAL CHIP	100	5%	1/10W	R506	1-216-841-11	METAL CHIP	47K	5%	1/10W
R460	1-216-809-11	METAL CHIP	100	5%	1/10W	R510	1-216-815-11	METAL CHIP	330	5%	1/10W
R461	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R511	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R462	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R512	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R463	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R513	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R464	1-216-841-11	METAL CHIP	47K	5%	1/10W	R514	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R465	1-216-841-11	METAL CHIP	47K	5%	1/10W	R515	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R466	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R516	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R467	1-216-809-11	METAL CHIP	100	5%	1/10W	R517	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R468	1-216-845-11	METAL CHIP	100K	5%	1/10W	R518	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R469	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	R519	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R470	1-216-809-11	METAL CHIP	100	5%	1/10W	R520	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R471	1-216-809-11	METAL CHIP	100	5%	1/10W	R521	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R472	1-216-853-11	METAL CHIP	470K	5%	1/10W	R522	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R473	1-216-809-11	METAL CHIP	100	5%	1/10W	R523	1-216-821-11	METAL CHIP	1K	5%	1/10W
R474	1-216-809-11	METAL CHIP	100	5%	1/10W	R524	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R475	1-216-809-11	METAL CHIP	100	5%	1/10W	R525	1-216-815-11	METAL CHIP	330	5%	1/10W
R476	1-216-818-11	METAL CHIP	560	5%	1/10W	R527	1-216-809-11	METAL CHIP	100	5%	1/10W
R478	1-216-864-11	SHORT CHIP				R528	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R479	1-216-864-11	SHORT CHIP				R529	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R480	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R531	1-216-833-11	METAL CHIP	10K	5%	1/10W
R481	1-216-809-11	METAL CHIP	100	5%	1/10W	R532	1-216-809-11	METAL CHIP	100	5%	1/10W
R482	1-216-809-11	METAL CHIP	100	5%	1/10W	R533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R483	1-216-821-11	METAL CHIP	1K	5%	1/10W	R535	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R484	1-216-821-11	METAL CHIP	1K	5%	1/10W	R536	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R485	1-216-821-11	METAL CHIP	1K	5%	1/10W	R537	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R486	1-216-809-11	METAL CHIP	100	5%	1/10W	R538	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R488	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	R540	1-216-864-11	SHORT CHIP			
R489	1-216-821-11	METAL CHIP	1K	5%	1/10W	R541	1-216-825-11	METAL CHIP	2.2K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R543	1-216-864-11	SHORT CHIP			
R544	1-216-815-11	METAL CHIP	330	5%	1/10W
R545	1-216-809-11	METAL CHIP	100	5%	1/10W
R546	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R547	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R548	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R549	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R550	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R551	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R552	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R553	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R554	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R555	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R556	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R557	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R558	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R559	1-216-864-11	SHORT CHIP			
R560	1-216-809-11	METAL CHIP	100	5%	1/10W
R562	1-216-805-11	METAL CHIP	47	5%	1/10W
R564	1-216-803-11	METAL CHIP	33	5%	1/10W
R565	1-216-803-11	METAL CHIP	33	5%	1/10W
R566	1-216-803-11	METAL CHIP	33	5%	1/10W
R567	1-216-804-11	METAL CHIP	39	5%	1/10W
R568	1-216-804-11	METAL CHIP	39	5%	1/10W
R569	1-216-804-11	METAL CHIP	39	5%	1/10W
R581	1-216-864-11	SHORT CHIP			
R582	1-216-864-11	SHORT CHIP			
R601	1-216-833-11	METAL CHIP	10K	5%	1/10W
R602	1-216-833-11	METAL CHIP	10K	5%	1/10W
R603	1-216-833-11	METAL CHIP	10K	5%	1/10W
R604	1-216-855-11	METAL CHIP	680K	5%	1/10W
R605	1-216-835-11	METAL CHIP	15K	5%	1/10W
R607	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R608	1-216-864-11	SHORT CHIP			
R611	1-249-405-11	CARBON	100	5%	1/4W
R614	1-216-840-11	METAL CHIP	39K	5%	1/10W
R615	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R616	1-249-405-11	CARBON	100	5%	1/4W
R619	1-216-833-11	METAL CHIP	10K	5%	1/10W
R620	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R621	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R622	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R623	1-216-841-11	METAL CHIP	47K	5%	1/10W
R624	1-216-817-11	METAL CHIP	470	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R625	1-216-839-11	METAL CHIP	33K	5%	1/10W
R628	1-216-843-11	METAL CHIP	68K	5%	1/10W
R629	1-218-879-11	METAL CHIP	22K	0.50%	1/10W
R631	1-216-864-11	SHORT CHIP			
R633	1-218-879-11	METAL CHIP	22K	0.50%	1/10W
R634	1-216-833-11	METAL CHIP	10K	5%	1/10W
R636	1-216-843-11	METAL CHIP	68K	5%	1/10W
R637	1-216-846-11	METAL CHIP	120K	5%	1/10W
R638	1-216-817-11	METAL CHIP	470	5%	1/10W
R639	1-216-839-11	METAL CHIP	33K	5%	1/10W
R641	1-216-864-11	SHORT CHIP			
R642	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R643	1-216-833-11	METAL CHIP	10K	5%	1/10W
R644	1-216-841-11	METAL CHIP	47K	5%	1/10W
R645	1-216-840-11	METAL CHIP	39K	5%	1/10W
R646	1-249-405-11	CARBON	100	5%	1/4W
R649	1-249-405-11	CARBON	100	5%	1/4W
R652	1-216-795-11	METAL CHIP	6.8	5%	1/10W
R653	1-216-842-11	METAL CHIP	56K	5%	1/10W
R654	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R655	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R656	1-216-842-11	METAL CHIP	56K	5%	1/10W
R657	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R658	1-218-870-11	METAL CHIP	9.1K	0.50%	1/10W
R659	1-216-809-11	METAL CHIP	100	5%	1/10W
R660	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R661	1-216-835-11	METAL CHIP	15K	5%	1/10W
R662	1-216-821-11	METAL CHIP	1K	5%	1/10W
R663	1-216-821-11	METAL CHIP	1K	5%	1/10W
R664	1-216-841-11	METAL CHIP	47K	5%	1/10W
R665	1-216-833-11	METAL CHIP	10K	5%	1/10W
R666	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R667	1-215-880-00	METAL OXIDE	10	5%	2W
R668	1-215-880-00	METAL OXIDE	10	5%	2W
R701	1-216-821-11	METAL CHIP	1K	5%	1/10W
R702	1-216-821-11	METAL CHIP	1K	5%	1/10W
R703	1-216-809-11	METAL CHIP	100	5%	1/10W
R704	1-216-809-11	METAL CHIP	100	5%	1/10W
R705	1-216-821-11	METAL CHIP	1K	5%	1/10W
R706	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R707	1-216-821-11	METAL CHIP	1K	5%	1/10W
R708	1-216-857-11	METAL CHIP	1M	5%	1/10W
R709	1-216-817-11	METAL CHIP	470	5%	1/10W
R710	1-216-857-11	METAL CHIP	1M	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R711	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R758	1-216-845-11	METAL CHIP	100K	5%	1/10W
R712	1-216-817-11	METAL CHIP	470	5%	1/10W	R759	1-216-833-11	METAL CHIP	10K	5%	1/10W
R713	1-216-833-11	METAL CHIP	10K	5%	1/10W	R760	1-216-809-11	METAL CHIP	100	5%	1/10W
R714	1-216-821-11	METAL CHIP	1K	5%	1/10W	R761	1-216-841-11	METAL CHIP	47K	5%	1/10W
R715	1-216-809-11	METAL CHIP	100	5%	1/10W	R762	1-216-809-11	METAL CHIP	100	5%	1/10W
R716	1-216-809-11	METAL CHIP	100	5%	1/10W	R763	1-216-805-11	METAL CHIP	47	5%	1/10W
R717	1-216-809-11	METAL CHIP	100	5%	1/10W	R764	1-216-833-11	METAL CHIP	10K	5%	1/10W
R718	1-216-809-11	METAL CHIP	100	5%	1/10W	R765	1-216-805-11	METAL CHIP	47	5%	1/10W
R719	1-216-833-11	METAL CHIP	10K	5%	1/10W	R766	1-216-821-11	METAL CHIP	1K	5%	1/10W
R720	1-216-809-11	METAL CHIP	100	5%	1/10W	R767	1-216-864-11	SHORT CHIP			
R721	1-216-809-11	METAL CHIP	100	5%	1/10W	R768	1-216-816-11	METAL CHIP	390	5%	1/10W
R722	1-216-809-11	METAL CHIP	100	5%	1/10W	R769	1-216-841-11	METAL CHIP	47K	5%	1/10W
R723	1-216-809-11	METAL CHIP	100	5%	1/10W	R770	1-216-833-11	METAL CHIP	10K	5%	1/10W
R724	1-216-809-11	METAL CHIP	100	5%	1/10W	R771	1-216-864-11	SHORT CHIP			
R725	1-216-841-11	METAL CHIP	47K	5%	1/10W	R772	1-216-816-11	METAL CHIP	390	5%	1/10W
R726	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R774	1-216-809-11	METAL CHIP	100	5%	1/10W
R727	1-216-821-11	METAL CHIP	1K	5%	1/10W	R775	1-216-809-11	METAL CHIP	100	5%	1/10W
R728	1-216-833-11	METAL CHIP	10K	5%	1/10W	R776	1-216-809-11	METAL CHIP	100	5%	1/10W
R729	1-216-841-11	METAL CHIP	47K	5%	1/10W	R777	1-216-809-11	METAL CHIP	100	5%	1/10W
R730	1-216-809-11	METAL CHIP	100	5%	1/10W	R778	1-216-864-11	SHORT CHIP			
R731	1-216-809-11	METAL CHIP	100	5%	1/10W	R779	1-216-837-11	METAL CHIP	22K	5%	1/10W
R732	1-216-809-11	METAL CHIP	100	5%	1/10W	R780	1-216-816-11	METAL CHIP	390	5%	1/10W
R733	1-216-813-11	METAL CHIP	220	5%	1/10W	R781	1-216-839-11	METAL CHIP	33K	5%	1/10W
R734	1-216-809-11	METAL CHIP	100	5%	1/10W	R782	1-216-833-11	METAL CHIP	10K	5%	1/10W
R735	1-216-809-11	METAL CHIP	100	5%	1/10W	R783	1-216-833-11	METAL CHIP	10K	5%	1/10W
R736	1-216-817-11	METAL CHIP	470	5%	1/10W	R784	1-216-833-11	METAL CHIP	10K	5%	1/10W
R737	1-216-816-11	METAL CHIP	390	5%	1/10W	R785	1-216-841-11	METAL CHIP	47K	5%	1/10W
R738	1-216-809-11	METAL CHIP	100	5%	1/10W	R786	1-216-841-11	METAL CHIP	47K	5%	1/10W
R740	1-216-809-11	METAL CHIP	100	5%	1/10W	R788	1-216-821-11	METAL CHIP	1K	5%	1/10W
R741	1-216-809-11	METAL CHIP	100	5%	1/10W	R789	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R742	1-216-809-11	METAL CHIP	100	5%	1/10W	R790	1-216-821-11	METAL CHIP	1K	5%	1/10W
R743	1-216-820-11	METAL CHIP	820	5%	1/10W	R792	1-216-833-11	METAL CHIP	10K	5%	1/10W
R744	1-216-809-11	METAL CHIP	100	5%	1/10W	R793	1-216-833-11	METAL CHIP	10K	5%	1/10W
R745	1-216-809-11	METAL CHIP	100	5%	1/10W	R797	1-216-821-11	METAL CHIP	1K	5%	1/10W
R746	1-216-809-11	METAL CHIP	100	5%	1/10W	R798	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R747	1-216-809-11	METAL CHIP	100	5%	1/10W	R799	1-216-833-11	METAL CHIP	10K	5%	1/10W
R748	1-216-833-11	METAL CHIP	10K	5%	1/10W	R800	1-216-809-11	METAL CHIP	100	5%	1/10W
R749	1-216-833-11	METAL CHIP	10K	5%	1/10W	R801	1-216-833-11	METAL CHIP	10K	5%	1/10W
R750	1-216-833-11	METAL CHIP	10K	5%	1/10W	R803	1-216-864-11	SHORT CHIP			
R751	1-216-809-11	METAL CHIP	100	5%	1/10W	R804	1-216-809-11	METAL CHIP	100	5%	1/10W
R752	1-216-809-11	METAL CHIP	100	5%	1/10W	R807	1-216-809-11	METAL CHIP	100	5%	1/10W
R755	1-216-833-11	METAL CHIP	10K	5%	1/10W	R809	1-216-833-11	METAL CHIP	10K	5%	1/10W
R756	1-216-833-11	METAL CHIP	10K	5%	1/10W	R810	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R757	1-216-833-11	METAL CHIP	10K	5%	1/10W	R811	1-211-990-11	METAL CHIP	75	0.50%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R812	1-216-809-11	METAL CHIP	100	5%	1/10W	R872	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R814	1-216-809-11	METAL CHIP	100	5%	1/10W	R873	1-216-821-11	METAL CHIP	1K	5%	1/10W
R815	1-216-821-11	METAL CHIP	1K	5%	1/10W	R874	1-216-821-11	METAL CHIP	1K	5%	1/10W
R816	1-216-833-11	METAL CHIP	10K	5%	1/10W	R875	1-216-821-11	METAL CHIP	1K	5%	1/10W
R817	1-216-809-11	METAL CHIP	100	5%	1/10W	R876	1-216-821-11	METAL CHIP	1K	5%	1/10W
R818	1-216-833-11	METAL CHIP	10K	5%	1/10W	R877	1-216-821-11	METAL CHIP	1K	5%	1/10W
R819	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R878	1-216-809-11	METAL CHIP	100	5%	1/10W
R820	1-216-833-11	METAL CHIP	10K	5%	1/10W	R879	1-216-809-11	METAL CHIP	100	5%	1/10W
R821	1-216-841-11	METAL CHIP	47K	5%	1/10W	R880	1-216-841-11	METAL CHIP	47K	5%	1/10W
R822	1-216-809-11	METAL CHIP	100	5%	1/10W	R881	1-216-809-11	METAL CHIP	100	5%	1/10W
R823	1-216-809-11	METAL CHIP	100	5%	1/10W	R882	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R824	1-216-833-11	METAL CHIP	10K	5%	1/10W	R883	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R829	1-216-833-11	METAL CHIP	10K	5%	1/10W	R884	1-216-821-11	METAL CHIP	1K	5%	1/10W
R831	1-216-833-11	METAL CHIP	10K	5%	1/10W	R885	1-216-821-11	METAL CHIP	1K	5%	1/10W
R832	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R886	1-216-809-11	METAL CHIP	100	5%	1/10W
R833	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R887	1-216-809-11	METAL CHIP	100	5%	1/10W
R834	1-216-833-11	METAL CHIP	10K	5%	1/10W	R888	1-216-821-11	METAL CHIP	1K	5%	1/10W
R835	1-216-833-11	METAL CHIP	10K	5%	1/10W	R889	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R836	1-216-841-11	METAL CHIP	47K	5%	1/10W	R890	1-216-833-11	METAL CHIP	10K	5%	1/10W
R837	1-216-833-11	METAL CHIP	10K	5%	1/10W	R891	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R838	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R892	1-216-818-11	METAL CHIP	560	5%	1/10W
R839	1-216-833-11	METAL CHIP	10K	5%	1/10W	R893	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R840	1-216-809-11	METAL CHIP	100	5%	1/10W	R894	1-216-818-11	METAL CHIP	560	5%	1/10W
R851	1-216-821-11	METAL CHIP	1K	5%	1/10W	R895	1-216-833-11	METAL CHIP	10K	5%	1/10W
R852	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W	R896	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R853	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W	R897	1-216-818-11	METAL CHIP	560	5%	1/10W
R854	1-218-858-11	METAL CHIP	3K	0.50%	1/10W	R898	1-216-833-11	METAL CHIP	10K	5%	1/10W
R855	1-218-871-11	METAL CHIP	10K	0.50%	1/10W	R899	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R856	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R900	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R857	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R901	1-216-821-11	METAL CHIP	1K	5%	1/10W
R858	1-216-837-11	METAL CHIP	22K	5%	1/10W	R902	1-216-809-11	METAL CHIP	100	5%	1/10W
R859	1-216-833-11	METAL CHIP	10K	5%	1/10W	R903	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R904	1-216-821-11	METAL CHIP	1K	5%	1/10W
R861	1-218-841-11	METAL CHIP	560	0.50%	1/10W	R905	1-216-821-11	METAL CHIP	1K	5%	1/10W
R862	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R906	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R863	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W	R907	1-216-809-11	METAL CHIP	100	5%	1/10W
R864	1-218-875-11	METAL CHIP	15K	0.50%	1/10W	R908	1-216-817-11	METAL CHIP	470	5%	1/10W
R865	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R909	1-216-821-11	METAL CHIP	1K	5%	1/10W
R866	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R910	1-216-817-11	METAL CHIP	470	5%	1/10W
R867	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W	R911	1-216-821-11	METAL CHIP	1K	5%	1/10W
R868	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R912	1-216-833-11	METAL CHIP	10K	5%	1/10W
R869	1-218-841-11	METAL CHIP	560	0.50%	1/10W	R913	1-216-821-11	METAL CHIP	1K	5%	1/10W
R870	1-218-887-11	METAL CHIP	47K	0.50%	1/10W	R914	1-216-820-11	METAL CHIP	820	5%	1/10W
R871	1-218-895-11	METAL CHIP	100K	0.50%	1/10W	R915	1-216-821-11	METAL CHIP	1K	5%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R916	1-216-833-11	METAL CHIP	10K	5%	1/10W
R917	1-216-821-11	METAL CHIP	1K	5%	1/10W
R918	1-216-821-11	METAL CHIP	1K	5%	1/10W
R919	1-216-821-11	METAL CHIP	1K	5%	1/10W
R920	1-216-821-11	METAL CHIP	1K	5%	1/10W
R921	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R922	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R923	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R924	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R925	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R926	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R927	1-218-860-11	METAL CHIP	3.6K	0.50%	1/10W
R928	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R929	1-218-860-11	METAL CHIP	3.6K	0.50%	1/10W
R930	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R931	1-218-860-11	METAL CHIP	3.6K	0.50%	1/10W
R932	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
R933	1-243-692-71	METAL OXIDE	220	5%	1W
R934	1-216-833-11	METAL CHIP	10K	5%	1/10W
R935	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R936	1-216-833-11	METAL CHIP	10K	5%	1/10W
R937	1-216-833-11	METAL CHIP	10K	5%	1/10W
R938	1-218-882-11	METAL CHIP	30K	0.50%	1/10W
R939	1-218-883-11	METAL CHIP	33K	0.50%	1/10W
R940	1-218-886-11	METAL CHIP	43K	0.50%	1/10W
R941	1-218-868-11	METAL CHIP	7.5K	0.50%	1/10W
R942	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R943	1-218-868-11	METAL CHIP	7.5K	0.50%	1/10W
R944	1-218-868-11	METAL CHIP	7.5K	0.50%	1/10W
R945	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R946	1-218-883-11	METAL CHIP	33K	0.50%	1/10W
R947	1-218-883-11	METAL CHIP	33K	0.50%	1/10W
R948	1-218-883-11	METAL CHIP	33K	0.50%	1/10W
R949	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R950	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R951	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R952	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R955	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R956	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R957	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R958	1-216-833-11	METAL CHIP	10K	5%	1/10W
R959	1-216-833-11	METAL CHIP	10K	5%	1/10W
R960	1-216-797-11	METAL CHIP	10	5%	1/10W
R961	1-216-797-11	METAL CHIP	10	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES
		RESISTOR BRIDGE	
⚠ RB1	1-233-576-11	RES, CHIP NETWORK 100	(3216)
		TUNER	
⚠ TU1	8-598-593-60	TUNER, FSS BTF-WA421	
TU2	8-598-594-10	TUNER, FSS BTF-FA421	
		VARISTOR	
VD461	1-804-499-21	VARISTOR, CHIP	(1608)
VD851	1-804-499-21	VARISTOR, CHIP	(1608)
VD852	1-804-499-21	VARISTOR, CHIP	(1608)
VD853	1-804-499-21	VARISTOR, CHIP	(1608)
VD854	1-804-499-21	VARISTOR, CHIP	(1608)
		CRYSTAL	
X1	1-781-282-11	VIBRATOR, CERAMIC	
X301	1-781-131-31	VIBRATOR, CRYSTAL	
X451	1-760-895-21	VIBRATOR, CERAMIC	
X701	1-767-686-21	VIBRATOR, CRYSTAL	
X702	1-781-589-21	VIBRATOR, CRYSTAL	
X851	1-795-954-21	PIEZOELECTRIC OSCILLATOR	

D

*⚠	A-1054-155-A	D BOARD, COMPLETE
	4-382-854-01	SCREW (M3X8), P, SW (+)
	7-682-952-09	SCREW +PSW 3X16

The high-voltage leads associated with the FBT on the D board are not included and must be ordered separately. Order the following leads when requesting this D Board:

⚠	1-779-095-51	LEAD ASSY, HIGH-VOLTAGE
⚠	1-900-260-40	CONNECTOR ASSY, MV

		CAPACITOR			
C5002	1-165-602-91	CERAMIC	220pF	10	2KV
C5005	1-106-383-00	MYLAR	0.047µF	5%	200V
C5006	1-165-602-91	CERAMIC	220pF	10	2KV
C5008	1-104-332-11	CERAMIC	470pF	10%	2KV
C5009	1-104-987-11	MYLAR	0.001µF	5%	200V
C5010	1-104-987-11	MYLAR	0.001µF	5%	200V
C5016	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C5017	1-104-987-11	MYLAR	0.001µF	5%	200V
	C5019	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
	C5021	1-126-964-11	ELECT	10µF	20%	50V
⚠	C5022	1-117-640-11	FILM	6800pF	3%	1.2KV
	C5103	1-126-934-11	ELECT	220µF	20%	16V
	C5104	1-126-941-11	ELECT	470µF	20%	25V
	C5105	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
	C5106	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
	C5107	1-130-783-71	MYLAR	0.33µF	10%	100V
	C5108	1-126-968-11	ELECT	100µF	20%	50V
	C5109	1-126-941-11	ELECT	470µF	20%	25V
	C5110	1-104-987-11	MYLAR	0.001µF	5%	200V
	C5111	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
	C5121	1-126-960-11	ELECT	1µF	20%	50V
	C5201	1-137-150-51	FILM	0.01µF	5%	100V
	C5202	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C5203	1-126-933-11	ELECT	100µF	20%	16V
	C5204	1-107-648-91	ELECT	100µF	20%	200V
	C5205	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V
	C5206	1-106-383-00	MYLAR	0.047µF	5%	200V
	C5207	1-104-665-11	ELECT	100µF	20%	25V
	C5208	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C5209	1-162-924-11	CERAMIC CHIP	56pF	5%	50V
	C5210	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
	C5211	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C5212	1-126-965-91	ELECT	22µF	20%	50V
	C5213	1-126-965-91	ELECT	22µF	20%	50V
	C5223	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
	C5228	1-100-613-81	CERAMIC	470pF	5%	1KV
	C5410	1-104-987-11	MYLAR	0.001µF	5%	200V
	C5418	1-117-813-11	FILM	0.75µF	5%	250V
	C5419	1-107-649-11	ELECT	2.2µF	20%	250V
	C5552	1-126-964-11	ELECT	10µF	20%	50V
	C5553	1-107-698-11	ELECT	10µF	20%	25V
	C5555	1-109-879-11	CERAMIC	22pF	5%	2KV
	C5556	1-109-879-11	CERAMIC	22pF	5%	2KV
	C5557	1-117-214-11	CERAMIC	0.001µF	10%	2KV
	C5703	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
	C6400	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
	C6401	1-126-964-11	ELECT	10µF	20%	50V
	C6402	1-126-963-11	ELECT	4.7µF	20%	50V
	C6403	1-126-968-11	ELECT	100µF	20%	50V
	C6405	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C6406	1-136-479-11	FILM	0.001µF	5%	100V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C6407	1-136-497-81	FILM	0.1µF	5%	50V
C6409	1-126-947-11	ELECT	47µF	20%	35V
C6411	1-100-613-81	CERAMIC	470pF	5%	1KV
C6412	1-100-613-81	CERAMIC	470pF	5%	1KV
C6413	1-165-954-11	FILM	56000pF	3%	800V
C6414	1-117-228-71	MYLAR	2.2µF	10%	450V
C6415	1-126-968-11	ELECT	100µF	20%	50V
C6416	1-126-948-11	ELECT	100µF	20%	35V
C6418	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C6419	1-126-941-11	ELECT	470µF	20%	25V
C6420	1-126-941-11	ELECT	470µF	20%	25V
C6500	1-126-952-11	ELECT	1000µF	20%	35V
C6501	1-126-952-11	ELECT	1000µF	20%	35V
C6503	1-131-970-11	ELECT	1500µF	20%	25V
C6504	1-131-970-11	ELECT	1500µF	20%	25V
C6505	1-131-970-11	ELECT	1500µF	20%	25V
C6506	1-126-941-11	ELECT	470µF	20%	25V
C6509	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C6512	1-165-441-81	ELECT	33µF	20%	160V
C6514	1-107-662-11	ELECT	22µF	20%	350V
C6515	1-165-733-31	ELECT	100µF	20%	25V
C6517	1-126-933-11	ELECT	100µF	20%	16V
C6519	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C6601	1-104-666-11	ELECT	220µF	20%	25V
C6602	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C6603	1-162-969-11	CERAMIC CHIP	0.0068µF	10%	25V
C6604	1-126-935-11	ELECT	470µF	20%	16V
C6615	1-115-349-51	CERAMIC	0.01µF		2KV
C6700	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C6707	1-104-987-11	MYLAR	0.001µF	5%	200V
C6803	1-126-235-11	ELECT	100µF	20%	16V
C6804	1-126-964-11	ELECT	10µF	20%	50V
C8001	1-126-964-11	ELECT	10µF	20%	50V
C8002	1-126-964-11	ELECT	10µF	20%	50V
C8003	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8006	1-126-960-11	ELECT	1µF	20%	50V
C8007	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C8008	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C8012	1-126-947-11	ELECT	47µF	20%	35V
C8015	1-126-947-11	ELECT	47µF	20%	35V
C8016	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C8017	1-126-964-11	ELECT	10µF	20%	50V
C8018	1-126-964-11	ELECT	10µF	20%	50V
C8020	1-136-497-81	FILM	0.1µF	5%	50V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C8021	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C8022	1-100-385-91	CERAMIC CHIP	0.47µF		25V
C8024	1-126-947-11	ELECT	47µF	20%	35V
C8025	1-126-947-11	ELECT	47µF	20%	35V
C8027	1-136-497-81	FILM	0.1µF	5%	50V
C8028	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C8030	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8031	1-126-933-11	ELECT	100µF	20%	16V
C8032	1-117-160-51	FILM	680pF	2.00%	100V
C8033	1-126-964-11	ELECT	10µF	20%	50V
C8035	1-100-614-81	CERAMIC	330pF	5%	1KV
C8036	1-100-614-81	CERAMIC	330pF	5%	1KV
C8037	1-165-954-11	FILM	56000pF	3%	800V
C8038	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8040	1-104-666-11	ELECT	220µF	20%	25V
C8041	1-136-497-81	FILM	0.1µF	5%	50V
C8042	1-136-189-00	MYLAR	0.1µF	10%	250V
C8045	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C8046	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V
C8048	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C8063	1-135-945-22	FILM	10000pF	3%	800V
C8065	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C8070	1-126-964-11	ELECT	10µF	20%	50V
C8073	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
C8074	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8075	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8076	1-126-963-11	ELECT	4.7µF	20%	50V
C8077	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C8078	1-126-964-11	ELECT	10µF	20%	50V
C8139	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9401	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9402	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9403	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9404	1-126-968-11	ELECT	100µF	20%	50V
C9405	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9406	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9407	1-126-968-11	ELECT	100µF	20%	50V
C9408	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9409	1-126-968-11	ELECT	100µF	20%	50V
C9410	1-126-968-11	ELECT	100µF	20%	50V
C9411	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9413	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9415	1-165-740-21	ELECT	150µF	20%	35V
C9416	1-165-740-21	ELECT	150µF	20%	35V
C9417	1-165-740-21	ELECT	150µF	20%	35V
C9418	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9419	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9420	1-165-740-21	ELECT	150µF	20%	35V
C9423	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C9425	1-162-927-11	CERAMIC CHIP	100pF	5%	50V

CONNECTOR

*	CN5003	1-564-509-11	PLUG, CONNECTOR	6P
*	CN5004	1-779-890-11	CONNECTOR, BOARD TO BOARD	10P
*	CN5005	1-779-890-11	CONNECTOR, BOARD TO BOARD	10P
*	CN5006	1-779-890-11	CONNECTOR, BOARD TO BOARD	10P
*	CN5009	1-580-689-11	PIN, CONNECTOR (PC BOARD)	4P
*	CN5010	1-580-689-11	PIN, CONNECTOR (PC BOARD)	4P
*	CN5011	1-580-689-11	PIN, CONNECTOR (PC BOARD)	4P
*	CN5013	1-564-506-11	PLUG, CONNECTOR	3P
*	CN5014	1-564-506-11	PLUG, CONNECTOR	3P
*	CN5015	1-564-506-11	PLUG, CONNECTOR	3P
*	CN5016	1-779-890-11	CONNECTOR, BOARD TO BOARD	10P
*	CN5017	1-779-890-11	CONNECTOR, BOARD TO BOARD	10P
*	CN5019	1-564-506-11	PLUG, CONNECTOR	3P
	CN5500	1-764-101-11	PIN, CONNECTOR (PC BOARD)	2P
*	CN6400	1-580-843-11	PIN, CONNECTOR (POWER)	
*	CN9405	1-564-507-11	PLUG, CONNECTOR	4P
*	CN9406	1-564-507-11	PLUG, CONNECTOR	4P
*	CN9407	1-564-507-11	PLUG, CONNECTOR	4P

DIODE

D5003	8-719-081-97	DIODE	MMDL914T1
D5005	8-719-081-97	DIODE	MMDL914T1
D5101	8-719-036-94	DIODE	RD5.6SB-T1
D5102	8-719-908-03	DIODE	GP08D
D5201	8-719-110-39	DIODE	RD15ESB1
D5202	8-719-028-45	DIODE	D2L20U
D5203	8-719-081-97	DIODE	MMDL914T1
D5204	8-719-081-97	DIODE	MMDL914T1
D5205	8-719-081-97	DIODE	MMDL914T1
D5206	8-719-081-97	DIODE	MMDL914T1
D5207	8-719-081-97	DIODE	MMDL914T1
D5208	8-719-081-97	DIODE	MMDL914T1
D5209	8-719-066-11	DIODE	1PS184-115
D5701	8-719-070-57	DIODE	PDZ5.6B-115
D6401	8-719-083-78	DIODE	10ERA60-TP

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REF. NO.	PART NO.	DESCRIPTION	VALUES
D6406	8-719-082-03	DIODE	MM3Z15VT1
D6407	8-719-082-03	DIODE	MM3Z15VT1
D6409	6-500-567-21	DIODE	10ERB20-TB5
D6410	6-500-567-21	DIODE	10ERB20-TB5
D6411	8-719-082-03	DIODE	MM3Z15VT1
D6413	8-719-082-03	DIODE	MM3Z15VT1
D6415	8-719-082-03	DIODE	MM3Z15VT1
D6502	8-719-060-88	DIODE	D4SBS6
D6503	8-719-060-88	DIODE	D4SBS6
D6504	8-719-510-13	DIODE	D10SC4MR
D6508	8-719-062-40	DIODE	D4SBL20µF3
D6509	8-719-052-90	DIODE	D1NL40-TA2
D6510	8-719-052-37	DIODE	F10P04Q
D6601	8-719-078-04	DIODE	EC31QS03L-TE12L
D6602	6-500-027-01	DIODE	MM3Z8V2ST1
D6603	8-719-081-97	DIODE	MMDL914T1
D6606	8-719-028-72	DIODE	RGP02-17EL-6433
D6800	8-719-150-92	DIODE	RD33EB3T
D6803	8-719-081-97	DIODE	MMDL914T1
D6804	6-500-654-01	DIODE	MM3Z3V0T1
D6805	8-719-081-97	DIODE	MMDL914T1
D8001	8-719-081-97	DIODE	MMDL914T1
D8003	8-719-081-97	DIODE	MMDL914T1
D8005	8-719-081-97	DIODE	MMDL914T1
D8006	6-500-567-21	DIODE	10ERB20-TB5
D8007	8-719-081-97	DIODE	MMDL914T1
D8009	8-719-072-69	DIODE	PDZ15B-115
D8010	8-719-083-78	DIODE	10ERA60-TP
D8011	8-719-082-03	DIODE	MM3Z15VT1
D8012	8-719-082-03	DIODE	MM3Z15VT1
D8015	8-719-081-97	DIODE	MMDL914T1
D8019	8-719-070-10	DIODE	NNCD5.1A-T1
D8022	8-719-063-73	DIODE	D1NL20U-TR
D8023	8-719-070-10	DIODE	NNCD5.1A-T1
D8024	8-719-976-99	DIODE	DTZ5.1B
D8026	8-719-081-97	DIODE	MMDL914T1
D8027	6-500-654-01	DIODE	MM3Z3V0T1
D8030	8-719-056-93	DIODE	UDZ-TE-17-18B
D8034	8-719-056-83	DIODE	UDZ-TE-17-6.8B
D8038	8-719-082-03	DIODE	MM3Z15VT1
D8039	8-719-082-03	DIODE	MM3Z15VT1
D8041	8-719-082-03	DIODE	MM3Z15VT1
D8140	8-719-404-50	DIODE	MA111-TX
D9407	8-719-991-33	DIODE	1SS133T-77
D9409	8-719-110-17	DIODE	RD10ESB2

FERRITE BEAD

FB5201	1-469-578-11	FERRITE	1.1µH
FB5203	1-469-127-21	FERRITE	0µH
FB5205	1-469-578-11	FERRITE	1.1µH
FB6400	1-469-579-11	FERRITE	0.45µH
FB6401	1-469-579-11	FERRITE	0.45µH
FB6402	1-469-579-11	FERRITE	0.45µH
FB6403	1-469-579-11	FERRITE	0.45µH
FB6405	1-469-579-11	FERRITE	0.45µH
FB6406	1-469-579-11	FERRITE	0.45µH
FB6407	1-469-579-11	FERRITE	0.45µH
FB6408	1-469-579-11	FERRITE	0.45µH
FB6500	1-469-579-11	FERRITE	0.45µH
FB6501	1-469-579-11	FERRITE	0.45µH
FB6506	1-469-578-11	FERRITE	1.1µH
FB6507	1-469-578-11	FERRITE	1.1µH
FB6508	1-469-578-11	FERRITE	1.1µH
FB8001	1-469-579-11	FERRITE	0.45µH
FB8002	1-469-579-11	FERRITE	0.45µH
FB8003	1-469-579-11	FERRITE	0.45µH

IC

IC5101	8-759-593-33	IC	LA78045
IC5201	8-759-585-82	IC	BA9759F-E2
IC6400	6-705-810-01	IC	MCZ3001DB
IC6501	8-759-458-79	IC	PQ12RD11
IC6503	6-704-264-01	IC	EK1135
IC6601	6-706-502-01	IC	SI-8015JF
IC6801	8-749-921-86	IC	SE-140N
IC8001	8-759-700-07	IC	NJM2903M
IC8002	6-705-810-01	IC	MCZ3001DB
IC8004	8-759-701-01	IC	NJM2904M
IC8005	8-759-586-17	IC	TL1431CZ-AP
IC8104	8-759-586-17	IC	TL1431CZ-AP
IC9400	6-600-383-01	IC	STK394-510
IC9401	6-600-383-01	IC	STK394-510

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

D

REF. NO.	PART NO.	DESCRIPTION	VALUES
	CHIP CONDUCTOR		
JR1016	1-216-864-11	SHORT CHIP	
JR1020	1-216-864-11	SHORT CHIP	
JR1021	1-216-864-11	SHORT CHIP	
JR1022	1-216-864-11	SHORT CHIP	
JR5001	1-216-864-11	SHORT CHIP	
JR5002	1-216-864-11	SHORT CHIP	
JR5003	1-216-864-11	SHORT CHIP	
JR5004	1-216-864-11	SHORT CHIP	
JR8001	1-216-864-11	SHORT CHIP	
JR8003	1-216-864-11	SHORT CHIP	
JR8004	1-216-864-11	SHORT CHIP	
JR8009	1-216-864-11	SHORT CHIP	
JR8010	1-216-864-11	SHORT CHIP	
	COIL		
L5101	1-406-665-11	INDUCTOR	100µH
L5202	1-414-189-31	INDUCTOR	100µH
L5403	1-456-109-11	COIL,HORIZONTAL LINEARITY(HLC)	
L5405	1-412-552-11	INDUCTOR	2.2MH
L6400	1-414-187-11	INDUCTOR	47µH
L6501	1-412-525-31	INDUCTOR	10µH
L6502	1-412-525-31	INDUCTOR	10µH
L6503	1-412-525-31	INDUCTOR	10µH
L6504	1-412-525-31	INDUCTOR	10µH
L6505	1-412-525-31	INDUCTOR	10µH
L6508	1-412-525-31	INDUCTOR	10µH
L6601	1-412-537-31	INDUCTOR	100µH
L8002	1-428-950-31	INDUCTOR	125µH
L9400	1-414-187-11	INDUCTOR	47µH
L9401	1-414-187-11	INDUCTOR	47µH
L9402	1-414-187-11	INDUCTOR	47µH
L9403	1-414-187-11	INDUCTOR	47µH
L9404	1-412-533-21	INDUCTOR	47µH
L9405	1-412-533-21	INDUCTOR	47µH
L9406	1-412-533-21	INDUCTOR	47µH
L9407	1-412-533-21	INDUCTOR	47µH
	PHOTO COUPLER		
⚠ PH6700	6-600-187-01	PHOTO COUPLER	PC123Y22JOOF
⚠ PH8001	6-600-187-01	PHOTO COUPLER	PC123Y22JOOF
⚠ PH8003	6-600-187-01	PHOTO COUPLER	PC123Y22JOOF
⚠ PH8004	6-600-187-01	PHOTO COUPLER	PC123Y22JOOF

REF. NO.	PART NO.	DESCRIPTION	VALUES	
	IC LINK			
⚠ PS6500	1-533-790-42	IC LINK	7A	90V
⚠ PS6501	1-533-790-42	IC LINK	7A	90V
⚠ PS9400	1-533-594-32	IC LINK	2.5A	90V
⚠ PS9401	1-533-594-32	IC LINK	2.5A	90V
⚠ PS9402	1-533-594-32	IC LINK	2.5A	90V
⚠ PS9403	1-533-594-32	IC LINK	2.5A	90V
⚠ PS9404	1-533-594-32	IC LINK	2.5A	90V
⚠ PS9405	1-533-594-32	IC LINK	2.5A	90V
	TRANSISTOR			
Q5001	6-550-144-01	TRANSISTOR	2SC5778-YB	
Q5004	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5005	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5006	8-729-038-83	TRANSISTOR	2SK2251-01-F19	
Q5008	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5009	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q5101	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5102	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5103	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5201	6-550-153-01	TRANSISTOR	FQpF12P20XDTU	
Q5202	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5203	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5521	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q5522	8-729-046-80	TRANSISTOR	2SC4634LS-CB11	
Q5701	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q5702	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q6400	6-550-882-01	TRANSISTOR	2SK3568(LBS2SONY,Q	
Q6401	6-550-882-01	TRANSISTOR	2SK3568(LBS2SONY,Q	
Q6802	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q6803	8-729-019-57	TRANSISTOR	2SA1208S-TP	
Q8003	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8004	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8007	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8008	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8010	8-729-010-25	TRANSISTOR	MSD601-RT1	
Q8011	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q8013	6-550-882-01	TRANSISTOR	2SK3568(LBS2SONY,Q	
Q8014	6-550-882-01	TRANSISTOR	2SK3568(LBS2SONY,Q	
Q8021	8-729-010-05	TRANSISTOR	MSB709-RT1	
Q8028	8-729-421-22	TRANSISTOR	UN2211	
Q8034	8-729-421-22	TRANSISTOR	UN2211	
Q8035	8-729-010-05	TRANSISTOR	MSB709-RT1	

D

RESISTOR

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R5001	1-243-619-71	METAL OXIDE	12K	5%	3W
R5002	1-243-619-71	METAL OXIDE	12K	5%	3W
R5003	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R5010	1-243-801-71	METAL OXIDE	0.22	5%	1W
R5019	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5020	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5021	1-216-809-11	METAL CHIP	100	5%	1/10W
R5023	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5024	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5025	1-216-809-11	METAL CHIP	100	5%	1/10W
R5028	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5029	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5031	1-249-393-11	CARBON	10	5%	1/4W
R5032	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5033	1-249-401-11	CARBON	47	5%	1/4W
R5101	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R5103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5106	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5107	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R5108	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R5109	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5110	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5111	1-249-383-11	CARBON	1.5	5%	1/4W
R5112	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R5113	1-218-865-11	METAL CHIP	5.6K	0.50%	1/10W
R5115	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R5116	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R5117	1-214-800-11	METAL	2.2	1%	1/2W
R5118	1-214-800-11	METAL	2.2	1%	1/2W
R5119	1-243-572-71	METAL OXIDE	470	5%	2W
R5120	1-243-572-71	METAL OXIDE	470	5%	2W
R5121	1-249-414-11	CARBON	560	5%	1/4W
R5126	1-218-917-11	METAL CHIP	820K	0.50%	1/10W
R5127	1-216-857-11	METAL CHIP	1M	5%	1/10W
R5201	1-218-879-11	METAL CHIP	22K	0.50%	1/10W
R5202	1-218-884-11	METAL CHIP	36K	0.50%	1/10W
R5206	1-249-425-11	CARBON	4.7K	5%	1/4W
R5207	1-218-889-11	METAL CHIP	56K	0.50%	1/10W
R5208	1-249-409-11	CARBON	220	5%	1/4W
R5209	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5210	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5211	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5212	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R5213	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5214	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5215	1-216-845-11	METAL CHIP	100K	5%	1/10W
R5216	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5217	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R5221	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5223	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5241	1-216-821-11	METAL CHIP	1K	5%	1/10W
R5243	1-216-843-11	METAL CHIP	68K	5%	1/10W
R5245	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5247	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R5249	1-216-837-11	METAL CHIP	22K	5%	1/10W
R5250	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
R5251	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5252	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
R5415	1-243-693-71	METAL OXIDE	270	5%	1W
R5435	1-260-314-11	CARBON	68	5%	1/2W
R5436	1-249-389-11	CARBON	4.7	5%	1/4W
R5581	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5582	1-249-441-11	CARBON	100K	5%	1/4W
R5583	1-260-107-11	CARBON	4.7K	5%	1/2W
R5584	1-249-441-11	CARBON	100K	5%	1/4W
R5585	1-249-441-11	CARBON	100K	5%	1/4W
R5586	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R5587	1-216-833-11	METAL CHIP	10K	5%	1/10W
R5588	1-249-441-11	CARBON	100K	5%	1/4W
R5589	1-216-842-11	METAL CHIP	56K	5%	1/10W
R5701	1-249-425-11	CARBON	4.7K	5%	1/4W
R5702	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6402	1-218-870-11	METAL CHIP	9.1K	0.50%	1/10W
R6405	1-218-823-11	METAL CHIP	100	0.50%	1/10W
R6406	1-245-478-21	METAL	470K	1%	1/4W
R6407	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
R6409	1-218-830-11	METAL CHIP	200	0.50%	1/10W
R6410	1-249-417-11	CARBON	1K	5%	1/4W
R6411	1-249-393-11	CARBON	10	5%	1/4W
R6412	1-249-393-11	CARBON	10	5%	1/4W
R6413	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6414	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6417	1-245-315-71	METAL OXIDE	0.1	5%	2W
R6418	1-245-315-71	METAL OXIDE	0.1	5%	2W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R6419	1-249-393-11	CARBON	10	5%	1/4W
	R6420	1-249-393-11	CARBON	10	5%	1/4W
⚠	R6421	1-202-933-61	FUSIBLE	0.1	10%	1/2W
	R6427	1-216-857-11	METAL CHIP	1M	5%	1/10W
	R6428	1-216-857-11	METAL CHIP	1M	5%	1/10W
	R6429	1-245-478-21	METAL	470K	1%	1/4W
	R6500	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R6501	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R6503	1-215-925-11	METAL OXIDE	22K	5%	3W
	R6504	1-260-298-51	CARBON	3.3	5%	1/2W
	R6515	1-249-377-11	CARBON	0.47	5%	1/4W
	R6590	1-249-409-11	CARBON	220	5%	1/4W
	R6601	1-218-858-11	METAL CHIP	3K	0.50%	1/10W
	R6602	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
	R6603	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R6604	1-218-874-11	METAL CHIP	13K	0.50%	1/10W
	R6605	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W
	R6612	1-249-377-11	CARBON	0.47	5%	1/4W
	R6700	1-216-817-11	METAL CHIP	470	5%	1/10W
	R6702	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R6703	1-218-484-11	METAL CHIP	750	5%	1/10W
	R6704	1-218-484-11	METAL CHIP	750	5%	1/10W
	R6705	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R6809	1-249-423-11	CARBON	3.3K	5%	1/4W
	R6810	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R6811	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R6812	1-243-511-71	METAL OXIDE	2.2	5%	3W
	R6813	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R6814	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
	R6815	1-216-837-11	METAL CHIP	22K	5%	1/10W
	R6816	1-216-846-11	METAL CHIP	120K	5%	1/10W
	R6817	1-216-846-11	METAL CHIP	120K	5%	1/10W
	R6818	1-245-471-21	METAL	240K	1%	1/4W
	R6821	1-245-471-21	METAL	240K	1%	1/4W
	R8001	1-219-512-11	METAL	2.2M	5%	1/2W
	R8002	1-219-512-11	METAL	2.2M	5%	1/2W
	R8003	1-216-839-11	METAL CHIP	33K	5%	1/10W
	R8004	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
	R8005	1-216-837-11	METAL CHIP	22K	5%	1/10W
	R8008	1-218-877-11	METAL CHIP	18K	0.50%	1/10W
	R8010	1-218-484-11	METAL CHIP	750	5%	1/10W
	R8011	1-216-849-11	METAL CHIP	220K	5%	1/10W
	R8012	1-218-484-11	METAL CHIP	750	5%	1/10W
	R8013	1-216-833-11	METAL CHIP	10K	5%	1/10W

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8014	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
	R8015	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
	R8016	1-247-843-11	CARBON	3.3K	5%	1/4W
	R8017	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
⚠	R8019	1-218-875-11	METAL CHIP	15K	0.50%	1/10W
	R8020	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8022	1-216-839-11	METAL CHIP	33K	5%	1/10W
	R8024	1-216-839-11	METAL CHIP	33K	5%	1/10W
	R8025	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8026	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
	R8027	1-218-891-11	METAL CHIP	68K	0.50%	1/10W
	R8028	1-218-871-11	METAL CHIP	10K	0.50%	1/10W
	R8029	1-218-891-11	METAL CHIP	68K	0.50%	1/10W
	R8030	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
	R8031	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
	R8032	1-216-817-11	METAL CHIP	470	5%	1/10W
	R8033	1-216-841-11	METAL CHIP	47K	5%	1/10W
⚠	R8035	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W
⚠	R8036	1-215-419-00	METAL	820	1%	1/4W
⚠	R8037	1-215-447-00	METAL	12K	1%	1/4W
⚠	R8038	1-215-447-00	METAL	12K	1%	1/4W
⚠	R8039	1-215-447-00	METAL	12K	1%	1/4W
⚠	R8040	1-215-445-00	METAL	10K	1%	1/4W
⚠	R8041	1-216-864-11	SHORT CHIP			
⚠	R8043	1-215-447-00	METAL	12K	1%	1/4W
	R8046	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
	R8049	1-218-823-11	METAL CHIP	100	0.50%	1/10W
	R8050	1-211-979-11	METAL CHIP	27	0.50%	1/10W
	R8051	1-202-933-61	FUSIBLE	0.1	10%	1/2W
	R8052	1-218-893-11	METAL CHIP	82K	0.50%	1/10W
	R8054	1-245-478-21	METAL	470K	1%	1/4W
	R8055	1-245-478-21	METAL	470K	1%	1/4W
	R8056	1-218-870-11	METAL CHIP	9.1K	0.50%	1/10W
	R8057	1-218-874-11	METAL CHIP	13K	0.50%	1/10W
	R8058	1-249-393-11	CARBON	10	5%	1/4W
	R8060	1-218-839-11	METAL CHIP	470	0.50%	1/10W
	R8061	1-249-393-11	CARBON	10	5%	1/4W
	R8062	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8063	1-216-833-11	METAL CHIP	10K	5%	1/10W
	R8066	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8069	1-249-425-11	CARBON	4.7K	5%	1/4W
	R8070	1-245-315-71	METAL OXIDE	0.1	5%	2W
	R8072	1-249-377-11	CARBON	0.47	5%	1/4W
	R8073	1-216-857-11	METAL CHIP	1M	5%	1/10W

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

A component identified by this ⋈ symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	R8074	1-216-857-11	METAL CHIP	1M	5%	1/10W
	R8076	1-249-411-11	CARBON	330	5%	1/4W
⚠	R8078	1-218-895-11	METAL CHIP	100K	0.50%	1/10W
	R8079	1-215-449-00	METAL	15K	1%	1/4W
	R8082	1-216-863-11	METAL CHIP	3.3M	5%	1/10W
	R8085	1-219-749-91	METAL	10K	5%	1/2W
	R8086	1-219-750-91	METAL	22K	5%	1/2W
	R8092	1-249-377-11	CARBON	0.47	5%	1/4W
	R8096	1-216-817-11	METAL CHIP	470	5%	1/10W
	R8097	1-216-797-11	METAL CHIP	10	5%	1/10W
	R8099	1-218-839-11	METAL CHIP	470	0.50%	1/10W
	R8137	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8138	1-216-857-11	METAL CHIP	1M	5%	1/10W
	R8144	1-216-849-11	METAL CHIP	220K	5%	1/10W
	R8145	1-216-841-11	METAL CHIP	47K	5%	1/10W
	R8146	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R8158	1-216-809-11	METAL CHIP	100	5%	1/10W
	R8159	1-216-835-11	METAL CHIP	15K	5%	1/10W
	R8160	1-216-853-11	METAL CHIP	470K	5%	1/10W
	R8161	1-216-833-11	METAL CHIP	10K	5%	1/10W
⚠	R8165	1-218-897-11	METAL CHIP	120K	0.50%	1/10W
	R8166	1-216-809-11	METAL CHIP	100	5%	1/10W
	R9407	1-218-823-11	METAL CHIP	100	0.50%	1/10W
	R9408	1-218-823-11	METAL CHIP	100	0.50%	1/10W
	R9409	1-218-823-11	METAL CHIP	100	0.50%	1/10W
	R9410	1-216-809-11	METAL CHIP	100	5%	1/10W
	R9411	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9412	1-218-823-11	METAL CHIP	100	0.50%	1/10W
	R9413	1-218-823-11	METAL CHIP	100	0.50%	1/10W
	R9414	1-218-823-11	METAL CHIP	100	0.50%	1/10W
	R9415	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9416	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9417	1-216-809-11	METAL CHIP	100	5%	1/10W
	R9418	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9419	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9420	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9424	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9425	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9427	1-214-808-11	METAL	4.7	1%	1/2W
	R9428	1-214-808-11	METAL	4.7	1%	1/2W
	R9430	1-214-808-11	METAL	4.7	1%	1/2W
	R9432	1-214-808-11	METAL	4.7	1%	1/2W
	R9433	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9434	1-214-808-11	METAL	4.7	1%	1/2W
	R9435	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9436	1-214-808-11	METAL	4.7	1%	1/2W
	R9437	1-214-808-11	METAL	4.7	1%	1/2W
	R9438	1-214-808-11	METAL	4.7	1%	1/2W
	R9440	1-214-808-11	METAL	4.7	1%	1/2W
	R9441	1-214-808-11	METAL	4.7	1%	1/2W
	R9442	1-214-808-11	METAL	4.7	1%	1/2W
	R9443	1-214-808-11	METAL	4.7	1%	1/2W
	R9446	1-214-808-11	METAL	4.7	1%	1/2W
	R9447	1-214-808-11	METAL	4.7	1%	1/2W
	R9448	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9450	1-218-887-11	METAL CHIP	47K	0.50%	1/10W
	R9451	1-214-808-11	METAL	4.7	1%	1/2W
	R9452	1-214-808-11	METAL	4.7	1%	1/2W
	R9453	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
	R9454	1-214-808-11	METAL	4.7	1%	1/2W
	R9455	1-214-808-11	METAL	4.7	1%	1/2W
	R9456	1-214-808-11	METAL	4.7	1%	1/2W
	R9457	1-214-808-11	METAL	4.7	1%	1/2W
	R9458	1-214-808-11	METAL	4.7	1%	1/2W
	R9459	1-214-808-11	METAL	4.7	1%	1/2W
	R9460	1-214-808-11	METAL	4.7	1%	1/2W
	R9461	1-214-808-11	METAL	4.7	1%	1/2W
	R9462	1-214-808-11	METAL	4.7	1%	1/2W
	R9463	1-214-808-11	METAL	4.7	1%	1/2W
	R9464	1-214-808-11	METAL	4.7	1%	1/2W
	R9465	1-214-808-11	METAL	4.7	1%	1/2W
	R9466	1-243-532-71	METAL OXIDE	120	5%	3W
	R9467	1-243-532-71	METAL OXIDE	120	5%	3W
	R9468	1-214-808-11	METAL	4.7	1%	1/2W
	R9470	1-214-808-11	METAL	4.7	1%	1/2W
	R9471	1-243-532-71	METAL OXIDE	120	5%	3W
	R9472	1-243-532-71	METAL OXIDE	120	5%	3W
	R9473	1-243-532-71	METAL OXIDE	120	5%	3W
	R9474	1-243-532-71	METAL OXIDE	120	5%	3W

VARIABLE RESISTOR

⋈	RV8002	1-225-627-91	RES, VAR, ADJ, CERMET 2K

SPARK GAP

SG5500	1-519-466-11	GAP, SPARK
SG8002	1-517-499-21	GAP, SPARK

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

D G

	REF. NO.	PART NO.	DESCRIPTION	VALUES		
		TRANSFORMER				
	T5001	1-437-739-11	TRANSFORMER, FERRITE (HDT)			
	T5002	1-443-395-11	FERRITE TRANSFOMAR (HOT)			
	T5500	1-443-394-11	TRANSFORMER, FERRITE (DFT)			
⚠	T6400	1-439-821-11	TRANSFORMER, CONVERTER (PIT)			
⚠	T8001	1-453-450-11	FBT ASSY NX-6030//M3A4			

G

*		**A-1054-157-A**	**G BOARD, COMPLETE**			
		4-382-854-01	SCREW (M3X8), P, SW (+)			
		CAPACITOR				
⚠	C6001	1-165-530-31	MYLAR	0.47µF	10	0V
⚠	C6002	1-119-894-51	CERAMIC	2200pF	20%	250V
⚠	C6003	1-165-530-31	MYLAR	0.47µF	10	0V
⚠	C6004	1-119-894-51	CERAMIC	2200pF	20%	250V
⚠	C6006	1-113-889-11	CERAMIC	0.001µF	20%	250V
	C6007	1-161-964-91	CERAMIC	0.0047µF		250V
	C6008	1-161-964-91	CERAMIC	0.0047µF		250V
	C6011	1-137-750-11	ELECT	1500µF	20%	250V
	C6012	1-137-750-11	ELECT	1500µF	20%	250V
⚠	C6013	1-119-894-51	CERAMIC	2200pF	20%	250V
⚠	C6015	1-119-894-51	CERAMIC	2200pF	20%	250V
	C6112	1-126-965-91	ELECT	22µF	20%	50V
	C6115	1-126-943-11	ELECT	2200µF	20%	25V
	C6116	1-126-967-11	ELECT	47µF	20%	50V
	C6120	1-126-968-11	ELECT	100µF	20%	50V
	C6127	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
		CONNECTOR				
*	CN6000	1-580-843-11	PIN, CONNECTOR (POWER)			
*⚠	CN6001	1-580-843-11	PIN, CONNECTOR (POWER)			
	CN6004	1-695-915-11	TAB (CONTACT)			
	CN6012	1-564-507-11	PLUG, CONNECTOR			4P
		DIODE				
	D6000	8-719-081-97	DIODE	MMDL914T1		
	D6005	8-719-022-99	DIODE	D6SB60L		
	D6006	8-719-083-78	DIODE	10ERA60-TP		
	D6007	8-719-083-78	DIODE	10ERA60-TP		
	D6108	8-719-056-93	DIODE	UDZ-TE-17-18B		
	D6109	8-719-510-02	DIODE	D1NS4		
	D6113	6-500-582-01	DIODE	KBP153G-A2		
	D6115	8-719-081-97	DIODE	MMDL914T1		
	D6116	8-719-081-97	DIODE	MMDL914T1		
	D6117	8-719-081-97	DIODE	MMDL914T1		
	D6118	6-500-555-01	DIODE	MM3Z27VT1		
	D6119	8-719-081-97	DIODE	MMDL914T1		
	D6120	8-719-081-97	DIODE	MMDL914T1		
	D6123	8-719-081-97	DIODE	MMDL914T1		
	D6301	6-500-567-21	DIODE	10ERB20-TB5		
		FUSE				
⚠	F6000	1-576-753-11	FUSE	6.3A		250V
		FUSE HOLDER				
⚠	FH6000	1-533-223-11	FUSE HOLDER	0A		0V
⚠	FH6001	1-533-223-11	FUSE HOLDER	0A		0V
		IC				
	IC6100	8-759-450-47	IC	BA05T		
		CHIP CONDUCTOR				
	JR6000	1-216-864-11	SHORT CHIP			
	JR6001	1-216-864-11	SHORT CHIP			
	JR6002	1-216-864-11	SHORT CHIP			
		COIL				
⚠	L6000	1-433-900-31	TRANSFORMER, LINE FILTER			
⚠	L6001	1-433-900-31	TRANSFORMER, LINE FILTER			
	L6002	1-406-977-21	INDUCTOR	100µH		
		TRANSISTOR				
	Q6102	8-729-010-25	TRANSISTOR	MSD601-RT1		
	Q6107	8-729-140-96	TRANSISTOR	2SD774-34		
	Q6109	8-729-010-05	TRANSISTOR	MSB709-RT1		
	Q6110	8-729-010-05	TRANSISTOR	MSB709-RT1		
	Q6111	8-729-010-25	TRANSISTOR	MSD601-RT1		
	Q6112	8-729-010-25	TRANSISTOR	MSD601-RT1		

NOTE: The components identified by shading and ⚠ mark are critical for safety. Replace only with part number specified.

NOTE: Les composants identifies per un trame et une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

GBM

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	RESISTOR				
⚠ R6001	1-219-568-91	METAL	8.2M	5%	1/2W
R6002	1-240-303-31	CEMENTED	0.22	5%	10W
R6004	1-240-303-31	CEMENTED	0.22	5%	10W
R6012	1-219-510-11	METAL	470K	5%	1/2W
R6013	1-219-510-11	METAL	470K	5%	1/2W
R6111	1-216-833-11	METAL CHIP	10K	5%	1/10W
R6113	1-216-821-11	METAL CHIP	1K	5%	1/10W
R6115	1-216-837-11	METAL CHIP	22K	5%	1/10W
R6119	1-216-837-11	METAL CHIP	22K	5%	1/10W
R6120	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6121	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6124	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6125	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6126	1-216-837-11	METAL CHIP	22K	5%	1/10W
R6127	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6128	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6129	1-216-841-11	METAL CHIP	47K	5%	1/10W
R6130	1-216-841-11	METAL CHIP	47K	5%	1/10W
	RELAY				
⚠ RY6000	1-755-395-11	RELAY (AC POWER)			
	TRANSFORMER				
⚠ T6101	1-437-783-11	TRANSFORMER, STANDBY			
	VARISTOR				
⚠ VD6000	1-804-992-21	VARISTOR			
VD6100	1-804-499-21	VARISTOR, CHIP	(1608)		

BM

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

REF. NO.	PART NO.	DESCRIPTION	VALUES		
*	**A-1063-104-A**	**BM BOARD, COMPLETE**			
	CAPACITOR				
C3032	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3035	1-117-681-11	ELECT CHIP	100µF	20%	16V
C3036	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3037	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3038	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3039	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3040	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3100	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3101	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3102	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3104	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3105	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3106	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3107	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3108	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3109	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3110	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3111	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3112	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3113	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3114	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3115	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3116	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3117	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3118	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3119	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3120	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3121	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3122	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3123	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3124	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3125	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3126	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3127	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3128	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3129	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3130	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3131	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3132	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3133	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3134	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3135	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3136	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3137	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3138	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3139	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3140	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3141	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3142	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3143	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3144	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3145	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3146	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3147	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3148	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3149	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3150	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3151	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3152	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3153	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3154	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3155	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3156	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3157	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3158	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3159	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3160	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3161	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3162	1-128-357-11	ELECT CHIP	10µF	20%	16V
C3163	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3164	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3165	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3166	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3167	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3168	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3169	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3170	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3171	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3172	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3173	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3174	1-124-778-00	ELECT CHIP	22µF	20%	6.3V
C3178	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3179	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3180	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3181	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3182	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3183	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3184	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3185	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3186	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3188	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3189	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3201	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3202	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3203	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3204	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3205	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3206	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3207	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3208	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3209	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3210	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3211	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3212	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3213	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3214	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3215	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3216	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3217	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3218	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3219	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3222	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3224	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3227	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3229	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3231	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3232	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3233	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3235	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3236	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3238	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3239	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3240	1-164-156-11	CERAMIC CHIP	0.1µF		25V

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3241	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3344	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3242	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3345	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C3243	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3346	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3244	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3347	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3245	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3351	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3246	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3352	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3248	1-216-864-11	SHORT CHIP				C3353	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3250	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3354	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3251	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3355	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3252	1-128-996-11	ELECT CHIP	4.7µF	20%	50V	C3357	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3256	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3358	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3304	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3360	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3305	1-126-206-11	ELECT CHIP	100µF	20%	6.3V	C3361	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3306	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3362	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3307	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3363	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3308	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3366	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3309	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3367	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3310	1-126-206-11	ELECT CHIP	100µF	20%	6.3V	C3368	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3311	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3369	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3312	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3370	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3313	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3371	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3316	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3372	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3318	1-124-779-00	ELECT CHIP	10µF	20%	16V	C3373	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3319	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3374	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3320	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3375	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3321	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3376	1-126-206-11	ELECT CHIP	100µF	20%	6.3V
C3322	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3377	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3323	1-124-779-00	ELECT CHIP	10µF	20%	16V	C3381	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3325	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3382	1-126-204-11	ELECT CHIP	47µF	20%	16V
C3326	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3383	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3328	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3384	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3329	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3385	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3330	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3386	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3332	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V	C3387	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3333	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3388	1-164-156-11	CERAMIC CHIP	0.1µF		25V
C3334	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3389	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3335	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3390	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3336	1-128-994-21	ELECT CHIP	47µF	20%	10V	C3391	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3337	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3392	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3338	1-164-156-11	CERAMIC CHIP	0.1µF		25V	C3393	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3339	1-126-204-11	ELECT CHIP	47µF	20%	16V	C3395	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3340	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3396	1-124-779-00	ELECT CHIP	10µF	20%	16V
C3341	1-126-204-11	ELECT CHIP	47µF	20%	16V	C3397	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3343	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3398	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C3453	1-124-779-00	ELECT CHIP	10µF	20%	16V
	C3454	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C3455	1-124-779-00	ELECT CHIP	10µF	20%	16V
	C3456	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C3457	1-124-779-00	ELECT CHIP	10µF	20%	16V
	C3458	1-164-156-11	CERAMIC CHIP	0.1µF		25V
	C3459	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C3460	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
	C3461	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C3462	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
	C3463	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
	C3465	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
	C3466	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
		CONNECTOR				
*	CN3001	1-816-448-11	CONNECTOR, BOARD TO BOARD			50P
		DIODE				
	D3301	8-719-066-11	DIODE	1PS184-115		
	D3302	8-719-066-10	DIODE	1PS181-115		
		FERRITE BEAD				
	FB3101	1-414-234-22	FERRITE	0µH		
	FB3203	1-469-110-21	FERRITE	0µH		
	FB3204	1-216-864-11	SHORT CHIP			
	FB3302	1-216-864-11	SHORT CHIP			
	FB3303	1-216-864-11	SHORT CHIP			
		FILTER				
	FL3000	1-234-177-21	FERRITE	0µH		
	FL3001	1-234-177-21	FERRITE	0µH		
	FL3003	1-234-177-21	FERRITE	0µH		
	FL3100	1-234-677-21	FILTER, EMI			
	FL3101	1-234-560-21	FILTER, LOW PASS			
	FL3102	1-234-559-21	FILTER, LOW PASS			
	FL3103	1-234-559-21	FILTER, LOW PASS			
	FL3104	1-234-177-21	FERRITE	0µH		
	FL3105	1-234-177-21	FERRITE	0µH		
	FL3106	1-234-177-21	FERRITE	0µH		
	FL3107	1-234-177-21	FERRITE	0µH		
	FL3200	1-234-177-21	FERRITE	0µH		

REF. NO.	PART NO.	DESCRIPTION	VALUES
FL3201	1-234-177-21	FERRITE	0µH
FL3301	1-781-923-21	FILTER, LOW PASS (SMD)	
FL3302	1-234-177-21	FERRITE	0µH
FL3304	1-234-177-21	FERRITE	0µH
FL3305	1-234-177-21	FERRITE	0µH
FL3306	1-234-177-21	FERRITE	0µH
	IC		
IC3101	8-752-425-02	IC	CXD3802BQ
IC3102	6-703-430-01	IC	MT48LC2M32B2TG-6-Y94W
IC3103	6-705-529-01	IC	LMH6658MMX/J5000172
IC3104	6-705-529-01	IC	LMH6658MMX/J5000172
IC3105	6-705-403-01	IC	PQ070XZ01ZPH
IC3106	6-705-403-01	IC	PQ070XZ01ZPH
IC3201	8-752-409-78	IC	CXD2095AQ
IC3202	6-703-791-01	IC	MSM56V16160F-8T3FM1
IC3204	6-702-552-01	IC	BU2374FV-E2
IC3205	6-705-403-01	IC	PQ070XZ01ZPH
IC3301	8-759-672-57	IC	CXD9509AQ
IC3302	6-703-430-01	IC	MT48LC2M32B2TG-6-Y94W
IC3303	8-752-409-20	IC	CXD2309AQ
IC3305	8-759-669-75	IC	TLC2932IPWR
IC3306	8-759-453-97	IC	TC7SET08FU(TE85R)
IC3307	8-759-453-97	IC	TC7SET08FU(TE85R)
IC3308	8-759-453-97	IC	TC7SET08FU(TE85R)
IC3309	8-759-082-57	IC	TC7W04FU
IC3310	6-705-403-01	IC	PQ070XZ01ZPH
IC3311	8-759-833-72	IC	NJM2870F25-TE2
	COIL		
L3101	1-412-029-11	INDUCTOR	10µH
L3102	1-469-555-21	INDUCTOR	10µH
L3103	1-412-029-11	INDUCTOR	10µH
L3104	1-412-026-11	INDUCTOR	1µH
L3105	1-412-026-11	INDUCTOR	1µH
L3106	1-412-026-11	INDUCTOR	1µH
L3107	1-412-029-11	INDUCTOR	10µH
L3201	1-412-026-11	INDUCTOR	1µH
L3202	1-469-555-21	INDUCTOR	10µH
L3203	1-469-555-21	INDUCTOR	10µH
L3204	1-412-026-11	INDUCTOR	1µH
L3205	1-412-026-11	INDUCTOR	1µH
L3302	1-469-561-21	INDUCTOR	100µH

REF. NO.	PART NO.	DESCRIPTION	VALUES
L3303	1-469-561-21	INDUCTOR	100µH
L3304	1-469-555-21	INDUCTOR	10µH
L3305	1-469-555-21	INDUCTOR	10µH
L3306	1-469-555-21	INDUCTOR	10µH
L3307	1-469-555-21	INDUCTOR	10µH
L3308	1-412-029-11	INDUCTOR	10µH
L3311	1-469-555-21	INDUCTOR	10µH
L3312	1-412-026-11	INDUCTOR	1µH
L3313	1-412-029-11	INDUCTOR	10µH
L3314	1-412-026-11	INDUCTOR	1µH
L3315	1-412-026-11	INDUCTOR	1µH
L3316	1-469-555-21	INDUCTOR	10µH
L3317	1-412-026-11	INDUCTOR	1µH
	TRANSISTOR		
Q3101	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3102	8-729-122-63	TRANSISTOR	2SA1226-E4
Q3103	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3104	8-729-122-63	TRANSISTOR	2SA1226-E4
Q3105	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3106	8-729-122-63	TRANSISTOR	2SA1226-E4
Q3109	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3110	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3111	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3112	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3113	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3301	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3302	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3304	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3305	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3306	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
Q3307	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
Q3308	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3310	8-729-010-25	TRANSISTOR	MSD601-RT1
Q3312	8-729-010-25	TRANSISTOR	MSD601-RT1
	RESISTOR		
R3023	1-216-864-11	SHORT CHIP	
R3024	1-216-832-11	METAL CHIP	8.2K 5% 1/10W
R3032	1-216-864-11	SHORT CHIP	
R3034	1-216-864-11	SHORT CHIP	
R3035	1-543-949-22	FERRITE	0µH
R3036	1-543-949-22	FERRITE	0µH
R3037	1-543-949-22	FERRITE	0µH
R3038	1-216-864-11	SHORT CHIP	
R3039	1-216-864-11	SHORT CHIP	
R3040	1-216-864-11	SHORT CHIP	
R3041	1-543-949-22	FERRITE	0µH
R3042	1-543-949-22	FERRITE	0µH
R3043	1-216-805-11	METAL CHIP	47 5% 1/10W
R3044	1-216-805-11	METAL CHIP	47 5% 1/10W
R3045	1-216-805-11	METAL CHIP	47 5% 1/10W
R3046	1-543-949-22	FERRITE	0µH
R3047	1-543-949-22	FERRITE	0µH
R3048	1-543-949-22	FERRITE	0µH
R3049	1-543-949-22	FERRITE	0µH
R3050	1-543-949-22	FERRITE	0µH
R3051	1-543-949-22	FERRITE	0µH
R3052	1-216-805-11	METAL CHIP	47 5% 1/10W
R3053	1-216-805-11	METAL CHIP	47 5% 1/10W
R3054	1-216-805-11	METAL CHIP	47 5% 1/10W
R3055	1-543-949-22	FERRITE	0µH
R3056	1-543-949-22	FERRITE	0µH
R3101	1-216-801-11	METAL CHIP	22 5% 1/10W
R3102	1-216-833-11	METAL CHIP	10K 5% 1/10W
R3103	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R3104	1-216-805-11	METAL CHIP	47 5% 1/10W
R3105	1-218-830-11	METAL CHIP	200 0.50% 1/10W
R3106	1-216-809-11	METAL CHIP	100 5% 1/10W
R3107	1-216-820-11	METAL CHIP	820 5% 1/10W
R3108	1-218-830-11	METAL CHIP	200 0.50% 1/10W
R3109	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R3110	1-216-805-11	METAL CHIP	47 5% 1/10W
R3111	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3112	1-216-809-11	METAL CHIP	100 5% 1/10W
R3113	1-216-820-11	METAL CHIP	820 5% 1/10W
R3114	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3115	1-216-805-11	METAL CHIP	47 5% 1/10W
R3116	1-216-805-11	METAL CHIP	47 5% 1/10W
R3117	1-216-823-11	METAL CHIP	1.5K 5% 1/10W
R3118	1-216-805-11	METAL CHIP	47 5% 1/10W
R3119	1-216-805-11	METAL CHIP	47 5% 1/10W
R3120	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3121	1-216-809-11	METAL CHIP	100 5% 1/10W
R3122	1-216-820-11	METAL CHIP	820 5% 1/10W
R3123	1-218-834-11	METAL CHIP	300 0.50% 1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3124	1-216-864-11	SHORT CHIP			
R3125	1-216-864-11	SHORT CHIP			
R3129	1-216-805-11	METAL CHIP	47	5%	1/10W
R3130	1-216-805-11	METAL CHIP	47	5%	1/10W
R3133	1-216-809-11	METAL CHIP	100	5%	1/10W
R3134	1-216-809-11	METAL CHIP	100	5%	1/10W
R3135	1-543-949-22	FERRITE	0µH		
R3136	1-543-949-22	FERRITE	0µH		
R3137	1-216-864-11	SHORT CHIP			
R3138	1-216-864-11	SHORT CHIP			
R3141	1-218-839-11	METAL CHIP	470	0.50%	1/10W
R3142	1-218-839-11	METAL CHIP	470	0.50%	1/10W
R3143	1-218-839-11	METAL CHIP	470	0.50%	1/10W
R3144	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R3145	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R3146	1-218-841-11	METAL CHIP	560	0.50%	1/10W
R3147	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R3148	1-218-867-11	METAL CHIP	6.8K	0.50%	1/10W
R3150	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W
R3151	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W
R3152	1-218-861-11	METAL CHIP	3.9K	0.50%	1/10W
R3153	1-211-977-11	METAL CHIP	22	0.50%	1/10W
R3154	1-216-809-11	METAL CHIP	100	5%	1/10W
R3155	1-216-809-11	METAL CHIP	100	5%	1/10W
R3156	1-216-847-11	METAL CHIP	150K	5%	1/10W
R3158	1-216-809-11	METAL CHIP	100	5%	1/10W
R3159	1-216-819-11	METAL CHIP	680	5%	1/10W
R3160	1-216-819-11	METAL CHIP	680	5%	1/10W
R3161	1-216-819-11	METAL CHIP	680	5%	1/10W
R3162	1-216-864-11	SHORT CHIP			
R3163	1-218-851-11	METAL CHIP	1.5K	0.50%	1/10W
R3164	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R3165	1-216-864-11	SHORT CHIP			
R3170	1-216-801-11	METAL CHIP	22	5%	1/10W
R3171	1-216-864-11	SHORT CHIP			
R3172	1-216-864-11	SHORT CHIP			
R3174	1-216-864-11	SHORT CHIP			
R3175	1-216-864-11	SHORT CHIP			
R3176	1-216-864-11	SHORT CHIP			
R3178	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3179	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3181	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3182	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3183	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3184	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3185	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R3186	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3187	1-216-864-11	SHORT CHIP			
R3190	1-216-864-11	SHORT CHIP			
R3191	1-216-864-11	SHORT CHIP			
R3192	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3193	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3194	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3195	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3196	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3197	1-216-864-11	SHORT CHIP			
R3198	1-216-864-11	SHORT CHIP			
R3199	1-216-855-11	METAL CHIP	680K	5%	1/10W
R3201	1-216-801-11	METAL CHIP	22	5%	1/10W
R3202	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3206	1-216-864-11	SHORT CHIP			
R3207	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3209	1-216-864-11	SHORT CHIP			
R3210	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3212	1-216-864-11	SHORT CHIP			
R3213	1-216-864-11	SHORT CHIP			
R3214	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3216	1-216-864-11	SHORT CHIP			
R3217	1-216-864-11	SHORT CHIP			
R3218	1-216-864-11	SHORT CHIP			
R3220	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3222	1-216-864-11	SHORT CHIP			
R3223	1-216-864-11	SHORT CHIP			
R3224	1-216-864-11	SHORT CHIP			
R3225	1-216-864-11	SHORT CHIP			
R3227	1-216-864-11	SHORT CHIP			
R3228	1-216-864-11	SHORT CHIP			
R3229	1-216-864-11	SHORT CHIP			
R3232	1-216-864-11	SHORT CHIP			
R3233	1-216-864-11	SHORT CHIP			
R3234	1-216-864-11	SHORT CHIP			
R3235	1-216-864-11	SHORT CHIP			
R3238	1-216-864-11	SHORT CHIP			
R3242	1-216-864-11	SHORT CHIP			
R3243	1-216-864-11	SHORT CHIP			
R3245	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3247	1-216-864-11	SHORT CHIP			
R3248	1-216-864-11	SHORT CHIP			

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3250	1-216-864-11	SHORT CHIP			
R3253	1-216-864-11	SHORT CHIP			
R3255	1-216-801-11	METAL CHIP	22	5%	1/10W
R3256	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3257	1-216-809-11	METAL CHIP	100	5%	1/10W
R3259	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R3262	1-216-809-11	METAL CHIP	100	5%	1/10W
R3265	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3266	1-216-837-11	METAL CHIP	22K	5%	1/10W
R3267	1-216-813-11	METAL CHIP	220	5%	1/10W
R3269	1-216-853-11	METAL CHIP	470K	5%	1/10W
R3271	1-216-864-11	SHORT CHIP			
R3272	1-216-805-11	METAL CHIP	47	5%	1/10W
R3279	1-216-864-11	SHORT CHIP			
R3280	1-218-838-11	METAL CHIP	430	0.50%	1/10W
R3281	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3282	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R3283	1-216-864-11	SHORT CHIP			
R3302	1-216-801-11	METAL CHIP	22	5%	1/10W
R3303	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3304	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3305	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R3306	1-216-801-11	METAL CHIP	22	5%	1/10W
R3307	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3308	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3310	1-216-801-11	METAL CHIP	22	5%	1/10W
R3311	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3312	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3315	1-216-809-11	METAL CHIP	100	5%	1/10W
R3316	1-216-801-11	METAL CHIP	22	5%	1/10W
R3317	1-216-801-11	METAL CHIP	22	5%	1/10W
R3318	1-216-813-11	METAL CHIP	220	5%	1/10W
R3320	1-216-864-11	SHORT CHIP			
R3321	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R3322	1-216-805-11	METAL CHIP	47	5%	1/10W
R3323	1-216-815-11	METAL CHIP	330	5%	1/10W
R3325	1-216-809-11	METAL CHIP	100	5%	1/10W
R3329	1-216-864-11	SHORT CHIP			
R3330	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3331	1-216-819-11	METAL CHIP	680	5%	1/10W
R3333	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3334	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3335	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R3336	1-216-855-11	METAL CHIP	680K	5%	1/10W
R3337	1-216-801-11	METAL CHIP	22	5%	1/10W
R3340	1-216-864-11	SHORT CHIP			
R3341	1-216-864-11	SHORT CHIP			
R3344	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3347	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3350	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3351	1-216-809-11	METAL CHIP	100	5%	1/10W
R3359	1-216-809-11	METAL CHIP	100	5%	1/10W
R3360	1-216-805-11	METAL CHIP	47	5%	1/10W
R3362	1-216-817-11	METAL CHIP	470	5%	1/10W
R3363	1-216-864-11	SHORT CHIP			
R3367	1-216-805-11	METAL CHIP	47	5%	1/10W
R3368	1-216-864-11	SHORT CHIP			
R3369	1-216-864-11	SHORT CHIP			
R3370	1-216-864-11	SHORT CHIP			
R3371	1-216-864-11	SHORT CHIP			
R3374	1-216-817-11	METAL CHIP	470	5%	1/10W
R3375	1-543-949-22	FERRITE	0µH		
R3376	1-543-949-22	FERRITE	0µH		
R3377	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3378	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3383	1-216-805-11	METAL CHIP	47	5%	1/10W
R3384	1-211-987-11	METAL CHIP	56	0.50%	1/10W
R3385	1-211-985-11	METAL CHIP	47	0.50%	1/10W
R3386	1-211-987-11	METAL CHIP	56	0.50%	1/10W
R3387	1-211-985-11	METAL CHIP	47	0.50%	1/10W
R3388	1-216-864-11	SHORT CHIP			
R3389	1-216-864-11	SHORT CHIP			
R3391	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R3392	1-216-818-11	METAL CHIP	560	5%	1/10W
R3393	1-216-864-11	SHORT CHIP			
R3395	1-216-817-11	METAL CHIP	470	5%	1/10W
R3396	1-216-864-11	SHORT CHIP			
R3401	1-216-805-11	METAL CHIP	47	5%	1/10W
R3402	1-216-801-11	METAL CHIP	22	5%	1/10W
R3403	1-216-809-11	METAL CHIP	100	5%	1/10W
R3404	1-216-809-11	METAL CHIP	100	5%	1/10W
R3405	1-216-809-11	METAL CHIP	100	5%	1/10W
R3406	1-216-801-11	METAL CHIP	22	5%	1/10W
R3407	1-216-801-11	METAL CHIP	22	5%	1/10W
R3408	1-216-801-11	METAL CHIP	22	5%	1/10W
R3409	1-216-864-11	SHORT CHIP			
R3410	1-218-855-11	METAL CHIP	2.2K	0.50%	1/10W
R3411	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3413	1-216-801-11	METAL CHIP	22	5%	1/10W
R3414	1-211-987-11	METAL CHIP	56	0.50%	1/10W
R3415	1-211-985-11	METAL CHIP	47	0.50%	1/10W
R3416	1-216-864-11	SHORT CHIP			
R3418	1-216-801-11	METAL CHIP	22	5%	1/10W
R3419	1-216-864-11	SHORT CHIP			
R3420	1-216-864-11	SHORT CHIP			
R3421	1-216-864-11	SHORT CHIP			
R3422	1-216-864-11	SHORT CHIP			
R3426	1-216-801-11	METAL CHIP	22	5%	1/10W
R3448	1-216-864-11	SHORT CHIP			
R3450	1-211-969-11	METAL CHIP	10	0.50%	1/10W
R3451	1-218-825-11	METAL CHIP	120	0.50%	1/10W
R3452	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3453	1-211-973-11	METAL CHIP	15	0.50%	1/10W
R3454	1-218-825-11	METAL CHIP	120	0.50%	1/10W
R3455	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3456	1-211-977-11	METAL CHIP	22	0.50%	1/10W
R3457	1-218-825-11	METAL CHIP	120	0.50%	1/10W
R3458	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3459	1-211-977-11	METAL CHIP	22	0.50%	1/10W
R3460	1-218-825-11	METAL CHIP	120	0.50%	1/10W
R3461	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3462	1-218-825-11	METAL CHIP	120	0.50%	1/10W
R3463	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3464	1-218-825-11	METAL CHIP	120	0.50%	1/10W
R3465	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3466	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3467	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3468	1-218-833-11	METAL CHIP	270	0.50%	1/10W
R3469	1-218-844-11	METAL CHIP	750	0.50%	1/10W
R3471	1-216-864-11	SHORT CHIP			
R3472	1-216-864-11	SHORT CHIP			
R3473	1-216-864-11	SHORT CHIP			
R3483	1-216-864-11	SHORT CHIP			
R3484	1-216-864-11	SHORT CHIP			
R3485	1-216-864-11	SHORT CHIP			
R3486	1-216-864-11	SHORT CHIP			
R3487	1-216-864-11	SHORT CHIP			
R3488	1-216-864-11	SHORT CHIP			
R3489	1-216-864-11	SHORT CHIP			
R3490	1-216-864-11	SHORT CHIP			
R3491	1-216-864-11	SHORT CHIP			

REF. NO.	PART NO.	DESCRIPTION	VALUES
	RESISTOR BRIDGE		
RB3101	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3102	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3103	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3104	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3105	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3106	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3107	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3108	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3109	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3110	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3111	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3112	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3113	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3114	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3115	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3116	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3117	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3201	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3202	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3203	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3204	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3205	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3206	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3207	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3208	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3209	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3210	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3303	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3304	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3305	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3306	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3309	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3310	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3311	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3312	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB3313	1-233-813-11	RES, NETWORK 150	(3216)
RB3314	1-233-813-11	RES, NETWORK 150	(3216)
RB3315	1-233-813-11	RES, NETWORK 150	(3216)
RB3316	1-233-813-11	RES, NETWORK 150	(3216)
RB3318	1-233-813-11	RES, NETWORK 150	(3216)
RB3319	1-233-813-11	RES, NETWORK 150	(3216)

BM P

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	CRYSTAL				
X3101	1-813-373-11	OSCILLATOR, CRYSTAL			
X3301	1-781-887-21	VIBRATOR, CRYSTAL			

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Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

*	**A-1068-754-A**	**P BOARD, COMPLETE**			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
	7-685-872-09	SCREW 3X8 (S)			
	CAPACITOR				
C9507	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9508	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9509	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9510	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C9511	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9513	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9514	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9515	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9516	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9517	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9519	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9521	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9523	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9524	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9525	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9526	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9527	1-164-505-11	CERAMIC CHIP	2.2µF		16V
C9528	1-126-246-11	ELECT CHIP	220µF	20%	4V
C9529	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9530	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9531	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9532	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9533	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9534	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9535	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9537	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9538	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C9540	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9541	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C9542	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9543	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9545	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9546	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C9547	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9549	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9550	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9551	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9552	1-126-246-11	ELECT CHIP	220µF	20%	4V
C9553	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
C9554	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9555	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9557	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9558	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9559	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9560	1-126-246-11	ELECT CHIP	220µF	20%	4V
C9561	1-100-756-91	CERAMIC CHIP	0.047µF		50V
C9562	1-127-692-11	CERAMIC CHIP	10µF	10%	16V
C9563	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9571	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9575	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C9576	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9578	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C9579	1-162-916-11	CERAMIC CHIP	12pF	5%	50V
C9583	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9584	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9585	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9586	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9587	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9588	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9589	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9623	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9824	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C9825	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C9826	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
C9828	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9830	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9831	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9832	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C9833	1-100-566-91	CERAMIC CHIP	0.1µF	10%	25V
C9835	1-100-588-21	ELECT CHIP	1000µF	20%	6.3V
C9836	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9839	1-126-394-11	ELECT CHIP	10µF	20%	16V
C9841	1-100-118-21	ELECT CHIP	82µF	20%	16V

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	REF. NO.	PART NO.	DESCRIPTION	VALUES		
	C9842	1-137-897-21	ELECT CHIP	150µF	20%	4V
	C9843	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
		CONNECTOR				
*	CN9500	1-818-400-11	HDMI CONNECTOR			
	CN9504	1-564-593-11	PLUG, CONNECTOR	14P		
		DIODE				
	D9500	8-719-210-39	DIODE	EC10QS-04		
	D9501	6-500-294-01	DIODE	PTZ-TE25-3.9B		
	D9502	8-719-977-28	DIODE	DTZ10B		
	D9503	8-719-977-28	DIODE	DTZ10B		
	D9506	8-719-404-50	DIODE	MA111-TX		
	D9507	8-719-404-50	DIODE	MA111-TX		
		FERRITE BEAD				
	FB9504	1-414-235-22	FERRITE	0µH		
	FB9505	1-414-235-22	FERRITE	0µH		
	FB9506	1-414-235-22	FERRITE	0µH		
	FB9507	1-414-235-22	FERRITE	0µH		
	FB9508	1-414-235-22	FERRITE	0µH		
	FB9509	1-414-235-22	FERRITE	0µH		
	FB9510	1-414-235-22	FERRITE	0µH		
	FB9512	1-414-235-22	FERRITE	0µH		
		FILTER				
*	FL9501	1-813-308-11	INDUCTOR	0µH		
*	FL9504	1-813-308-11	INDUCTOR	0µH		
*	FL9505	1-813-308-11	INDUCTOR	0µH		
*	FL9506	1-813-308-11	INDUCTOR	0µH		
		IC				
	IC9500	6-706-257-01	IC	FMS6418AM16X		
	IC9502	6-704-819-01	IC	CS4335-KSZR		
	IC9503	6-704-407-01	IC	PQ1CZ41H2ZPH		
	IC9504	6-704-001-01	IC	BR24L02F-WE2		
	IC9505	6-704-499-01	IC	SII9993CTG100		
	IC9506	6-703-042-01	IC	CD4052BNSR		
	IC9509	6-550-014-01	TRANSISTOR	SSM6N15FU(TE85R)		
	IC9514	8-759-331-71	IC	NJM4558E(TE2)		
	IC9517	6-804-248-01	IC	HD64F3694FXV-DA4		
	IC9521	8-759-642-22	IC	UPC29M05T-E2		

REF. NO.	PART NO.	DESCRIPTION	VALUES		
	JACK				
J9503	1-794-623-11	JACK, PIN	2P		
	COIL				
L9501	1-416-948-21	INDUCTOR	10µH		
L9502	1-400-303-21	INDUCTOR	68µH		
	IC LINK				
PS9500	1-576-415-21	FUSE	2A	32V	
	TRANSISTOR				
Q9501	8-729-024-88	TRANSISTOR	MUN2212T1		
Q9502	8-729-421-22	TRANSISTOR	UN2211		
Q9503	8-729-027-62	TRANSISTOR	DTC144WKA-T146		
Q9506	8-729-024-88	TRANSISTOR	MUN2212T1		
Q9511	8-729-421-22	TRANSISTOR	UN2211		
Q9514	8-729-027-62	TRANSISTOR	DTC144WKA-T146		
Q9516	8-729-421-22	TRANSISTOR	UN2211		
Q9517	8-729-421-22	TRANSISTOR	UN2211		
	RESISTOR				
R9501	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9502	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9505	1-216-841-11	METAL CHIP	47K	5%	1/10W
R9507	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9508	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9509	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9510	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9511	1-216-803-11	METAL CHIP	33	5%	1/10W
R9512	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9513	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9514	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9515	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9516	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9517	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9518	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9519	1-216-803-11	METAL CHIP	33	5%	1/10W
R9520	1-216-816-11	METAL CHIP	390	5%	1/10W
R9526	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9528	1-216-837-11	METAL CHIP	22K	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9529	1-216-850-11	METAL CHIP	270K	5%	1/10W
R9530	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9531	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9532	1-218-694-11	METAL CHIP	1.2K	0.50%	1/10W
R9533	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R9534	1-218-686-11	METAL CHIP	560	0.50%	1/10W
R9535	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9538	1-218-823-11	METAL CHIP	100	0.50%	1/10W
R9539	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9540	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9541	1-218-694-11	METAL CHIP	1.2K	0.50%	1/10W
R9542	1-216-850-11	METAL CHIP	270K	5%	1/10W
R9543	1-218-686-11	METAL CHIP	560	0.50%	1/10W
R9544	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9546	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9547	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9548	1-218-716-11	METAL CHIP	10K	0.50%	1/10W
R9552	1-216-817-11	METAL CHIP	470	5%	1/10W
R9555	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9556	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9557	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9558	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R9559	1-216-809-11	METAL CHIP	100	5%	1/10W
R9560	1-216-864-11	SHORT CHIP			
R9562	1-216-809-11	METAL CHIP	100	5%	1/10W
R9563	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9564	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9566	1-216-864-11	SHORT CHIP			
R9569	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9572	1-216-837-11	METAL CHIP	22K	5%	1/10W
R9574	1-216-809-11	METAL CHIP	100	5%	1/10W
R9575	1-216-809-11	METAL CHIP	100	5%	1/10W
R9576	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9577	1-216-857-11	METAL CHIP	1M	5%	1/10W
R9580	1-216-809-11	METAL CHIP	100	5%	1/10W
R9581	1-216-809-11	METAL CHIP	100	5%	1/10W
R9582	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9584	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9585	1-216-809-11	METAL CHIP	100	5%	1/10W
R9586	1-216-809-11	METAL CHIP	100	5%	1/10W
R9592	1-216-809-11	METAL CHIP	100	5%	1/10W
R9595	1-216-817-11	METAL CHIP	470	5%	1/10W
R9597	1-216-803-11	METAL CHIP	33	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R9602	1-216-809-11	METAL CHIP	100	5%	1/10W
R9606	1-216-864-11	SHORT CHIP			
R9612	1-216-864-11	SHORT CHIP			
R9614	1-216-809-11	METAL CHIP	100	5%	1/10W
R9615	1-216-809-11	METAL CHIP	100	5%	1/10W
R9616	1-216-809-11	METAL CHIP	100	5%	1/10W
R9623	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9624	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9625	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9626	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9627	1-216-809-11	METAL CHIP	100	5%	1/10W
R9850	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9851	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9852	1-218-644-11	METAL CHIP	10	0.50%	1/10W
R9853	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9854	1-216-845-11	METAL CHIP	100K	5%	1/10W
R9860	1-218-706-11	METAL CHIP	3.9K	0.50%	1/10W
R9864	1-218-701-11	METAL CHIP	2.4K	0.50%	1/10W
R9866	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9867	1-216-821-11	METAL CHIP	1K	5%	1/10W
R9868	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9869	1-216-833-11	METAL CHIP	10K	5%	1/10W
R9882	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9883	1-216-838-11	METAL CHIP	27K	5%	1/10W
R9884	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9885	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9886	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9887	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9888	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R9890	1-218-665-11	METAL CHIP	75	0.50%	1/10W
R9891	1-216-809-11	METAL CHIP	100	5%	1/10W

RESISTOR BRIDGE

RB9500	1-234-524-21	RES, CHIP NETWORK 33	(3216)
RB9510	1-233-576-11	RES, CHIP NETWORK 100	(3216)
RB9511	1-233-574-11	RES, CHIP NETWORK 10	(3216)
RB9512	1-233-574-11	RES, CHIP NETWORK 10	(3216)
RB9516	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB9517	1-236-908-11	NETWORK RESISTOR(CHIP)	10K

VARISTOR

VD9500	6-500-701-01	DIODE	PGB0010603NR
VD9501	6-500-701-01	DIODE	PGB0010603NR
VD9502	6-500-701-01	DIODE	PGB0010603NR
VD9503	6-500-701-01	DIODE	PGB0010603NR

P HA1 HB1

REF. NO.	PART NO.	DESCRIPTION	VALUES
VD9504	6-500-701-01	DIODE	PGB0010603NR
VD9505	6-500-701-01	DIODE	PGB0010603NR
VD9506	6-500-701-01	DIODE	PGB0010603NR
VD9507	6-500-701-01	DIODE	PGB0010603NR
VD9518	6-500-701-01	DIODE	PGB0010603NR
VD9519	6-500-701-01	DIODE	PGB0010603NR
	CRYSTAL		
X9501	1-767-984-21	VIBRATOR, CRYSTAL	

HA1

*		**A-1054-152-A**	**HA1 BOARD, MOUNTED**			
		CAPACITOR				
	C1201	1-126-157-11	ELECT	10µF	20%	16V
		CONNECTOR				
*	CN1201	1-564-524-11	PLUG, CONNECTOR	9P		
		DIODE				
	D1201	8-719-053-43	DIODE	SLR-325VCT31		
	D1202	8-719-053-43	DIODE	SLR-325VCT31		
	D1203	8-719-977-28	DIODE	DTZ10B		
		IC				
	IC1201	8-742-211-20	HYB IC	SBX3071-71		
		RESISTOR				
	R1201	1-216-809-11	METAL CHIP	100	5%	1/10W
	R1202	1-216-817-11	METAL CHIP	470	5%	1/10W
	R1203	1-216-819-11	METAL CHIP	680	5%	1/10W
	R1204	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R1205	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
	R1206	1-216-817-11	METAL CHIP	470	5%	1/10W
	R1207	1-216-817-11	METAL CHIP	470	5%	1/10W
	R1208	1-216-797-11	METAL CHIP	10	5%	1/10W
	R1209	1-216-837-11	METAL CHIP	22K	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES
	SWITCH		
S1201	1-572-198-11	SWITCH, KEYBOARD	
S1202	1-572-198-11	SWITCH, KEYBOARD	
S1203	1-572-198-11	SWITCH, KEYBOARD	
S1204	1-572-198-11	SWITCH, KEYBOARD	
S1205	1-572-198-11	SWITCH, KEYBOARD	
S1206	1-572-198-11	SWITCH, KEYBOARD	
S1207	1-572-198-11	SWITCH, KEYBOARD	

HB1

*		**A-1054-154-A**	**HB1 BOARD, MOUNTED** (KP-51WS520/57WS520 ONLY)			
		CAPACITOR				
	C1100	1-126-960-11	ELECT	1µF	20%	50V
	C1101	1-126-960-11	ELECT	1µF	20%	50V
		CONNECTOR				
*	CN1101	1-564-526-11	PLUG, CONNECTOR	11P		
		DIODE				
	D1100	8-719-977-28	DIODE	DTZ10B		
	D1101	8-719-977-28	DIODE	DTZ10B		
	D1103	8-719-977-28	DIODE	DTZ10B		
		JACK				
	J1101	1-770-361-11	TERMINAL BLOCK, S			
		RESISTOR				
	R1100	1-216-853-11	METAL CHIP	470K	5%	1/10W
	R1101	1-216-853-11	METAL CHIP	470K	5%	1/10W
	R1102	1-218-285-11	METAL CHIP	75	5%	1/10W
	R1103	1-218-285-11	METAL CHIP	75	5%	1/10W
	R1106	1-216-821-11	METAL CHIP	1K	5%	1/10W
	R1107	1-218-285-11	METAL CHIP	75	5%	1/10W

HB2 SR BH

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R1103	1-218-285-11	METAL CHIP	75	5%	1/10W
R1106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1107	1-218-285-11	METAL CHIP	75	5%	1/10W

HB2

* **A-1054-799-A HB2 BOARD, MOUNTED**
(KP-46WT520 ONLY)

CAPACITOR

C1150	1-126-960-11	ELECT	1µF	20%	50V
C1151	1-126-960-11	ELECT	1µF	20%	50V

CONNECTOR

* CN1151	1-564-526-11	PLUG, CONNECTOR			11P

DIODE

D1150	8-719-977-28	DIODE	DTZ10B		
D1151	8-719-977-28	DIODE	DTZ10B		
D1153	8-719-977-28	DIODE	DTZ10B		

JACK

J1151	1-750-515-11	TERMINAL BLOCK, S			3P

RESISTOR

R1150	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1151	1-216-853-11	METAL CHIP	470K	5%	1/10W
R1152	1-218-285-11	METAL CHIP	75	5%	1/10W
R1153	1-218-285-11	METAL CHIP	75	5%	1/10W
R1156	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1157	1-218-285-11	METAL CHIP	75	5%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES

SR

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

* **A-1405-083-A SR BOARD, MOUNTED**

CONNECTOR

* CN9901	1-564-506-11	PLUG, CONNECTOR		3P

DIODE

D9901	8-719-036-94	DIODE	RD5.6SB-T1

SWITCH

SB9901	1-477-983-21	PHOTO SENSOR

BH

Due to the complexity of this board, performing component level field repairs is not recommended. If service is required, complete board replacement is the preferred repair method.
Data is provided for reference only.

BH BOARD, MOUNTED

If the BH board needs to be replaced use an A Board part number to order the replacement kit.

CAPACITOR

C3032	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3040	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3101	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
C3102	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3104	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3105	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3106	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3107	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3108	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3109	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

BH

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3110	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3111	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3112	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3113	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3114	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3115	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3116	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3117	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3118	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3119	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3120	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3121	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3122	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3123	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3124	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3125	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3126	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3127	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3128	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3129	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3130	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3131	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3132	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3133	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3134	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3135	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3136	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3137	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3138	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3139	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3140	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3141	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3142	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3143	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3144	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3145	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3146	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3147	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3148	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3149	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3150	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3151	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3152	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3153	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3154	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3155	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3156	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3157	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3158	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3160	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3163	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3165	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3167	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3169	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3170	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3171	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3173	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3178	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3179	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3184	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3185	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3188	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3189	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
C3207	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3208	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3209	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3301	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3302	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C3305	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3306	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3307	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3311	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3312	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3313	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3314	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3315	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3316	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3317	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3318	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3320	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3321	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3324	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3325	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3328	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3329	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

BH

REF. NO.	PART NO.	DESCRIPTION	VALUES		
C3330	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3331	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3332	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3333	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3334	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3335	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3337	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3338	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3340	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3341	1-165-884-91	CERAMIC CHIP	2.2µF	10%	6.3V
C3342	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3343	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3344	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3345	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3346	1-165-884-91	CERAMIC CHIP	2.2µF	10%	6.3V
C3347	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3348	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3349	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3350	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3351	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3352	1-165-884-91	CERAMIC CHIP	2.2µF	10%	6.3V
C3353	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3354	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3355	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3356	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3357	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3358	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3359	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3360	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3361	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3362	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
C3363	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3365	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3366	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3367	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3368	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3370	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3371	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3372	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3373	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3374	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3375	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3376	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3377	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3378	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3379	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3380	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3381	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3382	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3383	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3384	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3385	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3386	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3387	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3388	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3389	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3390	1-126-205-11	ELECT CHIP	47µF	20%	6.3V
C3391	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3392	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3393	1-137-710-11	CERAMIC CHIP	10µF	20%	6.3V
C3394	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3395	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3397	1-100-507-91	CERAMIC CHIP	4.7µF	20%	6.3V
C3398	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3399	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3400	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
C3402	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3403	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C3404	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V

CONNECTOR

*	CN3001	1-816-448-11	CONNECTOR, BOARD TO BOARD		50P

FERRITE BEAD

FB3101	1-414-228-11	FERRITE	0µH
FB3102	1-400-180-21	INDUCTOR	0µH
FB3103	1-400-180-21	INDUCTOR	0µH
FB3301	1-400-180-21	INDUCTOR	0µH
FB3302	1-400-180-21	INDUCTOR	0µH

FILTER

FL3001	1-234-177-21	FERRITE	0µH
FL3100	1-234-677-21	FILTER, EMI	
FL3101	1-234-560-21	FILTER, LOW PASS	

BH

REF. NO.	PART NO.	DESCRIPTION	VALUES
FL3102	1-234-559-21	FILTER, LOW PASS	
FL3103	1-234-559-21	FILTER, LOW PASS	
FL3105	1-234-177-21	FERRITE	0µH
FL3301	1-234-854-21	FILTER, LOW PASS (SMD)	
	IC		
IC3101	8-752-425-02	IC	CXD3802BQ
IC3102	6-705-983-01	IC	IS42S32200B-6TL-TR
IC3103	6-706-706-01	IC	SN10503PWPR
IC3105	8-759-833-72	IC	NJM2870F25-TE2
IC3106	6-705-403-01	IC	PQ070XZ01ZPH
IC3205	6-705-403-01	IC	PQ070XZ01ZPH
IC3302	6-705-983-01	IC	IS42S32200B-6TL-TR
IC3303	8-759-649-46	IC	SN74AHC1G08DCKR
IC3306	8-759-649-46	IC	SN74AHC1G08DCKR
IC3310	8-759-833-72	IC	NJM2870F25-TE2
IC3311	8-759-833-72	IC	NJM2870F25-TE2
	COIL		
L3101	1-469-555-21	INDUCTOR	10µH
L3102	1-469-555-21	INDUCTOR	10µH
L3105	1-469-549-21	INDUCTOR	1µH
L3307	1-469-555-21	INDUCTOR	10µH
L3308	1-469-555-21	INDUCTOR	10µH
L3309	1-469-555-21	INDUCTOR	10µH
L3310	1-469-555-21	INDUCTOR	10µH
L3311	1-469-555-21	INDUCTOR	10µH
L3315	1-469-549-21	INDUCTOR	1µH
L3316	1-469-555-21	INDUCTOR	10µH
L3317	1-412-026-11	INDUCTOR	1µH
	TRANSISTOR		
Q3101	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3102	8-729-122-63	TRANSISTOR	2SA1226-E4
Q3103	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3104	8-729-122-63	TRANSISTOR	2SA1226-E4
Q3105	8-729-102-07	TRANSISTOR	2SC2223-F13
Q3106	8-729-122-63	TRANSISTOR	2SA1226-E4
Q3113	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q3306	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
Q3307	8-729-028-28	TRANSISTOR	2SK2036(TE85L)
Q3308	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q3310	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q3312	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q3313	8-729-600-22	TRANSISTOR	2SA1235-F
Q3314	8-729-120-28	TRANSISTOR	2SC1623-L5L6
	RESISTOR		
R3024	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
R3035	1-543-949-22	FERRITE	0µH
R3036	1-543-949-22	FERRITE	0µH
R3037	1-543-949-22	FERRITE	0µH
R3041	1-543-949-22	FERRITE	0µH
R3042	1-543-949-22	FERRITE	0µH
R3049	1-543-949-22	FERRITE	0µH
R3055	1-543-949-22	FERRITE	0µH
R3056	1-543-949-22	FERRITE	0µH
R3101	1-216-803-11	METAL CHIP	33 5% 1/10W
R3102	1-218-847-11	METAL CHIP	1K 0.50% 1/10W
R3103	1-216-819-11	METAL CHIP	680 5% 1/10W
R3104	1-216-805-11	METAL CHIP	47 5% 1/10W
R3105	1-218-830-11	METAL CHIP	200 0.50% 1/10W
R3106	1-216-809-11	METAL CHIP	100 5% 1/10W
R3107	1-216-819-11	METAL CHIP	680 5% 1/10W
R3108	1-218-830-11	METAL CHIP	200 0.50% 1/10W
R3109	1-216-819-11	METAL CHIP	680 5% 1/10W
R3110	1-216-805-11	METAL CHIP	47 5% 1/10W
R3111	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3112	1-216-809-11	METAL CHIP	100 5% 1/10W
R3113	1-216-819-11	METAL CHIP	680 5% 1/10W
R3114	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3115	1-216-809-11	METAL CHIP	100 5% 1/10W
R3116	1-216-809-11	METAL CHIP	100 5% 1/10W
R3117	1-216-819-11	METAL CHIP	680 5% 1/10W
R3118	1-216-809-11	METAL CHIP	100 5% 1/10W
R3119	1-216-805-11	METAL CHIP	47 5% 1/10W
R3120	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3121	1-216-809-11	METAL CHIP	100 5% 1/10W
R3122	1-216-819-11	METAL CHIP	680 5% 1/10W
R3123	1-218-834-11	METAL CHIP	300 0.50% 1/10W
R3124	1-216-809-11	METAL CHIP	100 5% 1/10W

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REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3125	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3129	1-216-805-11	METAL CHIP	47	5%	1/10W
R3130	1-216-805-11	METAL CHIP	47	5%	1/10W
R3133	1-216-809-11	METAL CHIP	100	5%	1/10W
R3134	1-216-809-11	METAL CHIP	100	5%	1/10W
R3135	1-543-949-22	FERRITE	0µH		
R3136	1-543-949-22	FERRITE	0µH		
R3141	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3142	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3143	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3144	1-218-849-11	METAL CHIP	1.2K	0.50%	1/10W
R3145	1-218-849-11	METAL CHIP	1.2K	0.50%	1/10W
R3146	1-218-849-11	METAL CHIP	1.2K	0.50%	1/10W
R3147	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R3148	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R3149	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R3163	1-218-851-11	METAL CHIP	1.5K	0.50%	1/10W
R3164	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R3170	1-216-801-11	METAL CHIP	22	5%	1/10W
R3172	1-216-864-11	SHORT CHIP			
R3176	1-216-864-11	SHORT CHIP			
R3181	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3182	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3186	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3190	1-216-864-11	SHORT CHIP			
R3199	1-216-855-11	METAL CHIP	680K	5%	1/10W
R3280	1-218-838-11	METAL CHIP	430	0.50%	1/10W
R3281	1-218-847-11	METAL CHIP	1K	0.50%	1/10W
R3282	1-218-873-11	METAL CHIP	12K	0.50%	1/10W
R3301	1-216-864-11	SHORT CHIP			
R3322	1-216-805-11	METAL CHIP	47	5%	1/10W
R3323	1-216-809-11	METAL CHIP	100	5%	1/10W
R3324	1-216-809-11	METAL CHIP	100	5%	1/10W
R3326	1-216-809-11	METAL CHIP	100	5%	1/10W
R3327	1-216-809-11	METAL CHIP	100	5%	1/10W
R3333	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3334	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3351	1-216-809-11	METAL CHIP	100	5%	1/10W
R3352	1-216-809-11	METAL CHIP	100	5%	1/10W
R3355	1-218-863-11	METAL CHIP	4.7K	0.50%	1/10W
R3356	1-216-821-11	METAL CHIP	1K	5%	1/10W
R3357	1-218-854-11	METAL CHIP	2K	0.50%	1/10W

REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3358	1-216-809-11	METAL CHIP	100	5%	1/10W
R3359	1-216-809-11	METAL CHIP	100	5%	1/10W
R3360	1-216-805-11	METAL CHIP	47	5%	1/10W
R3361	1-216-864-11	SHORT CHIP			
R3362	1-216-817-11	METAL CHIP	470	5%	1/10W
R3363	1-218-854-11	METAL CHIP	2K	0.50%	1/10W
R3364	1-218-826-11	METAL CHIP	130	0.50%	1/10W
R3365	1-218-826-11	METAL CHIP	130	0.50%	1/10W
R3366	1-218-826-11	METAL CHIP	130	0.50%	1/10W
R3367	1-216-805-11	METAL CHIP	47	5%	1/10W
R3368	1-218-829-11	METAL CHIP	180	0.50%	1/10W
R3369	1-216-813-11	METAL CHIP	220	5%	1/10W
R3370	1-216-851-11	METAL CHIP	330K	5%	1/10W
R3372	1-218-849-11	METAL CHIP	1.2K	0.50%	1/10W
R3373	1-218-859-11	METAL CHIP	3.3K	0.50%	1/10W
R3374	1-216-817-11	METAL CHIP	470	5%	1/10W
R3375	1-216-809-11	METAL CHIP	100	5%	1/10W
R3376	1-216-809-11	METAL CHIP	100	5%	1/10W
R3377	1-216-809-11	METAL CHIP	100	5%	1/10W
R3378	1-216-809-11	METAL CHIP	100	5%	1/10W
R3383	1-216-805-11	METAL CHIP	47	5%	1/10W
R3392	1-216-864-11	SHORT CHIP			
R3393	1-216-864-11	SHORT CHIP			
R3395	1-216-817-11	METAL CHIP	470	5%	1/10W
R3396	1-216-864-11	SHORT CHIP			
R3402	1-216-864-11	SHORT CHIP			
R3403	1-216-813-11	METAL CHIP	220	5%	1/10W
R3404	1-216-837-11	METAL CHIP	22K	5%	1/10W
R3406	1-216-833-11	METAL CHIP	10K	5%	1/10W
R3407	1-216-864-11	SHORT CHIP			
R3409	1-216-801-11	METAL CHIP	22	5%	1/10W
R3416	1-216-801-11	METAL CHIP	22	5%	1/10W
R3419	1-216-801-11	METAL CHIP	22	5%	1/10W

RESISTOR BRIDGE

RB3102	1-233-576-11	RES, CHIP NETWORK	100	(3216)
RB3103	1-233-576-11	RES, CHIP NETWORK	100	(3216)
RB3104	1-233-576-11	RES, CHIP NETWORK	100	(3216)
RB3105	1-233-576-11	RES, CHIP NETWORK	100	(3216)
RB3106	1-233-576-11	RES, CHIP NETWORK	100	(3216)
RB3107	1-233-576-11	RES, CHIP NETWORK	100	(3216)
RB3108	1-233-576-11	RES, CHIP NETWORK	100	(3216)
RB3109	1-233-576-11	RES, CHIP NETWORK	100	(3216)

REF. NO.	PART NO.	DESCRIPTION	VALUES
RB3110	1-233-576-11	RES, CHIP NETWORK	100 (3216)
RB3111	1-233-576-11	RES, CHIP NETWORK	100 (3216)
RB3112	1-233-576-11	RES, CHIP NETWORK	100 (3216)
RB3113	1-233-576-11	RES, CHIP NETWORK	100 (3216)
RB3114	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3115	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3116	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3117	1-236-908-11	NETWORK RESISTOR(CHIP)	10K
RB3303	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3304	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3305	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3306	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3309	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3310	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3311	1-239-409-11	NETWORK RESISTOR(CHIP)	47
RB3312	1-239-409-11	NETWORK RESISTOR(CHIP)	47

CRYSTAL

X3101	1-813-373-11	OSCILLATOR, CRYSTAL
X3301	1-813-114-21	VIBRATOR, CRYSTAL

MISCELLANEOUS

	7-600-001-97	TAPE, ACETATE (P2412) 25X30M
	7-600-003-52	TAPE, ACETATE (2142) 46X30M (KP-51WS520/57WS520 ONLY)
	7-600-005-96	BLACK ACETATE (NO.570F) 46X50M (KP-51WS520/57WS520 ONLY)
	7-600-019-13	TAPE, ACETATE (P2412HD) 25MMX30MM

ACCESSORIES AND PACKING

*	4-091-919-11	BAG, PROTECTION (KP-46WT520 ONLY)
	4-041-426-01	BAG, PROTECTION (KP-51WS520 ONLY)
*	4-076-420-01	BAG, PROTECTION (KP-57WS520 ONLY)
*	2-159-715-01	CARTON, INDIVIDUAL (KP-46WT520 ONLY)
*	2-021-821-01	CARTON, INDIVIDUAL (KP-51WS520 ONLY)
*	2-159-716-01	CARTON, INDIVIDUAL (KP-57WS520 ONLY)
*	2-021-820-01	CUSHION, LOWER (KP-46WT520 ONLY)
*	2-021-823-01	CUSHION, LOWER (KP-51WS520 ONLY)
*	2-021-825-01	CUSHION, LOWER (KP-57WS520 ONLY)
*	4-091-086-01	CUSHION, UPPER (KP-46WT520 ONLY)
*	2-021-824-01	CUSHION, UPPER (KP-51WS520 ONLY)
*	4-094-656-01	CUSHION, UPPER (KP-57WS520 ONLY)
	2-022-745-11	MANUAL, INSTRUCTION
	2-022-745-21	MANUAL, INSTRUCTION
	2-022-745-31	MANUAL, INSTRUCTION
*	4-042-463-01	SHEET, PROTECTION (KP-51WS520/57WS520 ONLY)
*	4-096-700-01	TRAY (KP-46WT520 ONLY)
*	4-094-659-01	TRAY (KP-57WS520 ONLY)

REMOTE COMMANDER

1-478-780-11	REMOTE COMMANDER (RM-Y916)
3-072-138-01	BATTERY COVER (for RM-Y916)

Sony Corporation
Sony Technology Center
Technical Services
Service Promotion Department

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